Service Reporting Getting Started

Version 1.2

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Before you contact BMC Software, have the following information available so that a technical support analyst can begin working on your problem immediately:

- product information
 - product name
 - product version (release number)
 - license number and password (trial or permanent)
- operating-system and environment information
 - machine type
 - operating system type, version, and service pack or program temporary fix (PTF)
 - system hardware configuration
 - serial numbers
 - related software (database, application, and communication) including type, version, and service pack or PTF

- sequence of events leading to the problem
- commands and options that you used
- messages received (and the time and date that you received them)
 - product error messages
 - messages from the operating system, such as file system full
 - messages from related software

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About This Book

This book contains detailed information about Service Reporting and is intended as a "read me first" document to help you install, configure, and get started using the application. Use this book with accompanying documents such as release notes, the *DataStore Administrator Guide*, and the *Reporting User Guide*.

In addition, BMC Software provides documentation for the Actuate Software Corporation components and Oracle Corporation components of Service Reporting. These documents are available as Portable Document Format (PDF) files on the PATROL Performance Documentation CD. For more information on the specific Oracle and Actuate documents, "Related Documentation" on page B-1 contains a list of the documents.

- Note -

This book assumes that you are familiar with your host operating system. You should know how to perform basic actions in a window environment, such as choosing menu commands and dragging and dropping icons.

How This Book Is Organized

This book is organized as follows. In addition, a glossary of terms and an index appear at the end of the book.

Chapter/Appendix	Description
Chapter 1 "Introducing Service Reporting"	Provides an introduction to Service Reporting and its various components.
Chapter 2 "Pre-Installation Information for Service Reporting on Windows NT and Windows 2000"	Describes the requirements you must satisfy and the tasks you must perform before you install Service Reporting on Windows NT.
Chapter 3 "Installing Service Reporting on Windows NT and Windows 2000"	Describes the procedure for installing Service Reporting on Windows NT.
Chapter 4 "Pre-Installation Information for Service Reporting on Sun Solaris"	Describes the requirements you must satisfy and the tasks you must perform before you install Service Reporting on Sun Solaris.
Chapter 5 "Installing Service Reporting on Sun Solaris"	Describes the procedure for installing Service Reporting on Sun Solaris Unix computers.
Chapter 6 "Configuring Service Reporting"	Describes what you need to do and know to configure Service Reporting components.
Appendix A, "Troubleshooting"	Provides troubleshooting tips and recommendations.
Appendix B, "Related Documentation"	Describes related documentation.
Appendix C, "Service Reporting Component List"	Provides a list of Service Reporting components.

Related Documentation

BMC Software products offer several types of documentation:

- online and printed books
- online Help
- release notes

Online and Printed Books

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In some cases, installation of Acrobat Reader and downloading the online books is an optional part of the product-installation process. For information about downloading the free reader from the Web, go to the Adobe Systems site at http://www.adobe.com.

To view any online book that BMC Software offers, visit the support page of the BMC Software Web site at http://www.bmc.com/support.html. Select a product to access the related documentation.

To Request Additional Printed Books

BMC Software provides a core set of printed books with your product order. To request additional books, go to http://www.bmc.com/support.html.

Online Help

You can access Help for a product through the product's Help menu. The online Help provides information about the product's graphical user interface (GUI) and provides instructions for completing tasks.

Release Notes

Printed release notes accompany each BMC Software product. Release notes provide up-to-date information such as

- updates to the installation instructions
- last-minute product information

The latest versions of the release notes are also available on the Web at http://www.bmc.com/support.

Conventions

The following conventions are used in this book:

• This book includes special elements called <i>notes</i> and <i>warnings</i> :
Note —
Notes provide additional information about the current subject.
Warning
Warnings alert you to situations that can cause problems, such as loss of data, if you do not follow instructions carefully.

- In instructions, boldface type highlights information that you enter.
 File names, directories, and Web addresses also appear in boldface type.
- The symbol => connects items in a menu sequence. For example,
 Actions => Create Test instructs you to choose the Create Test command from the Actions menu.
- The symbol >> denotes one-step instructions.

Introducing Service Reporting

This chapter introduces Service Reporting and includes the following topics:

Service Reporting Overview
Optimizing Business-Critical Applications Through Reports 1-2
Understanding the Process Flow from Data Collection
to Reporting1-5
Understanding the Service Reporting Studio1-5
Behind the Scenes: Where Is the Data?
Getting Started with Service Reporting

Service Reporting Overview

Service Reporting is a collection of tools you can use in your current PATROL environment to gather and store data, and create reports. The reports you can create, based on the stored data, reflect your enterprise. Because Service Reporting integrates data collection, storage and report creation and viewing tools, you can use the product to optimize your business-critical applications.

Optimizing Business-Critical Applications Through Reports

Service Reporting's report creation and viewing tools provide predefined (Solution Reports) and user-defined (QuickReports) reports. You can use any combination of Solution Reports or QuickReports to look at information from different points of view.

By examining different aspects of information through the reports you choose, you can get a more thorough understanding of how applications in your enterprise are—or are not—functioning. Better still, you can use the depth of information provided through the reports you choose to make decisions on how to optimize performance.

Understanding Solution Reports

Solution Reports are predefined, prescheduled reports that provide out-of-the-box functionality and require little or no setup. If your responsibilities include system administration, Solution Reports are especially helpful for performing daily tasks and planning for future growth in the enterprise.

Solution Reports are designed to give you detailed information on system, application, and database performance. With this information, you can keep your enterprise tuned.

Solution Reports available in this version are:

- Solution Reports for Microsoft Exchange Server
- Solution Reports for Microsoft Exchange 2000

- Solution Reports for NT Server
- Solution Reports for Lotus Domino
- Solution Reports for Oracle
- Solution Reports for Unix

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To view specific solution reports, you must be licensed by BMC Software for the corresponding Knowledge Module. For example, if you want to generate Solution Reports for Oracle, you must be licensed for PATROL KM for Oracle to collect the data. Contact your BMC Software representative for more information.

Understanding QuickReports

QuickReports are user-defined report templates that you create, schedule, edit, and delete by using the "QuickReport Editor," a Web-hosted utility that guides you through each step. The information in your selected QuickReport is pulled from the . The is where collected data is summarized for use in later reporting. For more information, see "Behind the Scenes: Where Is the Data?" on page 1-6.

To create a report template, choose one of the available template styles (as shown in Table 1-1), and then specify the data you want in your reports, such as computers, applications, parameters, instances, time spans, units of measure, titles, and so forth.

N	_	v
- 1	 u	,

You can use any parameter that any PATROL KM collects as the basis of a QuickReport.

Table 1-1 QuickReport Template Types

To List or Display	Choose This Template
A user-defined number of components and their associated events, in table format.	Event Summary Table
The measurement value of a particular enterprise component for a specified time span of the report along with the top or bottom n readings for a measurement or parameter, in table format.	Hot Spots Table
The n component values where the user-specified threshold (above or below) was crossed (the time span is also user-specified), in table format.	Hot Spots Threshold Table
The n number of components with the highest or lowest values of a parameter, in bar graph format.	Summary Graph
A number of components and their associated parameter values, in table format.	Summary Table
The measurement value of a set of components representing a specific time period (the time span is user-specified) in line graph format.	Trend Graph
Multiple measurements for multiple components representing a specific time period (the time span is user-specified) in line graph format.	Trend Graph (Multi-Parameter)
The measurement value of a set of components representing a specific time period, in table format (the time span is user-specified).	Trend Table
Multiple measurements for multiple components representing a specific time period (the time span is user-specified) in table format.	Trend Table (Multi-Parameter)
Several different KM parameters for the same node/instance in order to get the detail information about a specific node/instance. The report produces several (usually four) line graphs on the same page. Each line graph shows each parameter during the specific time span.	Multi-Quadrant Trend Graph

	For more details on QuickReport template types, see the online help.
Understanding the	e Service Reporting Studio
	The Service Reporting Studio is the report customizing component of Service Reporting. Using the Actuate documentation along with the <i>Service Reporting DataStore Schema</i> , you can use the Studio to design your own reports.
	Contact your sales representative for help implementing the customized solutions that the Reporting Studio provides. Your sales representative can tell you what support services your contract provides, including our professional services organization.
	Warning
	BMC Software distributes the Service Reporting Studio on the Service Reporting product CDs as the customizing component. This customizing environment is licensed <i>only</i> through the purchase of PATROL for Service Level Management.

Note —

Behind the Scenes: Where Is the Data?

The primary source of data for Service Reporting is information that PATROL KMs and their associated agents collect. The collected data represents the current state of system resources you have chosen to manage and monitor.

The collected data is in the DataStore, which serves as a central repository. Once information is in the DataStore, it is ready to be used as the basis for one or multiple reports.

Understanding the Process Flow from Data Collection to Reporting

There are two parts to Service Reporting

- Configuring and collecting data
- Selecting the data you want to see and viewing, storing, and manipulating the resulting reports

Configuring and Collecting Data

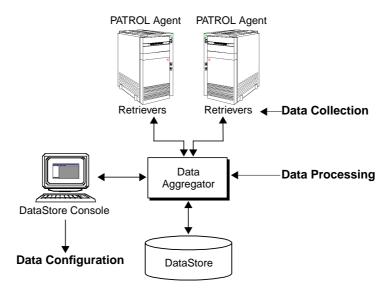
You can configure and collect data from any computer where a PATROL Agent is already installed. Basically, the following occurs (see Figure 1-1):

- **Data configuration**—the Console lets you configure retrievers, filters, and collection schedules.
- **Data collection**—an installed retriever collects data from agents and sends it to a data aggregator.
- **Data processing**—a data aggregator sends data from multiple retrievers to the DataStore.

Note
For more details on data collection and summarization, see the DataStore
Administrator Guide.

Figure 1-1 Collecting and Configuring Data

Data Collection and Configuration



Selecting Data and Viewing Completed Reports

You can create reports (QuickReports) based on any parameter data stored in the DataStore, or view predefined parameters on Solution Reports. Once a graph or report is created, you can publish it to the Web. Basically, the following occurs (see Figure 1-2).

- Report creation—you choose a report template through the QuickReport Editor, or choose a predefined, prescheduled Solution Report from the Web Desktop
- **Report viewing**—you view the report you selected through the Web Desktop or IE 5.0 or Netscape 4.5 or later
- Report administration—you store reports in the Report Encyclopedia for later administration through the Administrator Desktop

Report Creation and Viewing QuickReport Report Server Reporting Portal Report Encyclopedia Solution Report Report Web Server Report creation and viewing Report Consoles administration QuickReport Editor Administrator Desktop Web Desktop QuickReport Solution Report

Figure 1-2 Selecting Data and Viewing Completed Reports

Note that the Administrator Desktop, Web Desktop, and Reporting Portal can be installed on one machine (preferred) or multiples.

Note

For more information about the different components, data collection, processing, and storage, see the *DataStore Administrator Guide*.

For more information about report configuration, creation, storage, and manipulation, see the *Reporting User Guide*.

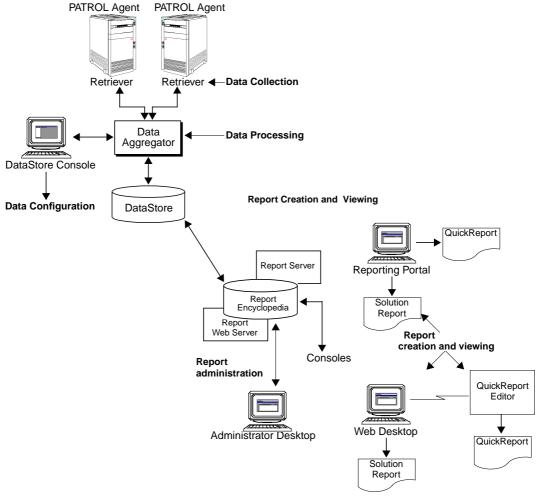
For more information about customizing your reports with the Reporting Studio, see the *Service Reporting DataStore Schema*. This customizing environment is licensed *only* through the purchase of PATROL for Service Level Management.

Service Reporting's Overall Architecture

In Service Reporting, the product architecture combines data collection and report creation and manipulation as shown in Figure 1-3.

Figure 1-3 Service Reporting Data Collection and Reporting Architecture

Data Collection and Configuration



Note that the Administrator Desktop, Web Desktop, and Reporting Portal can be installed on one machine (preferred) or two.

Recommended Installation Configurations

BMC Software has tested and recommends the following configurations. Select the configuration that best describes your environment.

- Chapter 3: Installing Service Reporting on Windows NT and Windows 2000
 Describes how to install all components (data collection, reporting, and database) on a single Windows NT or Windows 2000 computer or multiple Windows NT or Windows 2000 computers.
- Chapter 5: Installing Service Reporting on Sun Solaris Computers
 Describes how to install Service Reporting components on a single
 Sun Solaris computer or multiple Sun Solaris computers.

Note —

When installing Service Reporting in a Sun Solaris environment you still need a Windows NT or Windows 2000 computer for the following components:

- ~ DataStore Console
- ~ Administrator Desktop
- ~ Reporting Studio

Getting Started with Service Reporting

Now that you have a brief introduction, to run Service Reporting as quickly as possible, BMC Software recommends that you do the following:



First, turn to the Glossary at the end of this book. Even if you're a current PATROL user, you'll find new terminology in Service Reporting. Use the Glossary to get familiar with the new terms you'll see in this book.



Second, read the preinstallation for Windows NT, Windows 2000, and Unix information carefully. This step is critical; you must ensure that your environment and target computers meet minimum standards for the setup option you want, before you begin installing the product. For more preinstallation details, turn to Chapter 2, "Pre-Installation Information for Service Reporting on Windows NT and Windows 2000" or Chapter 4, "Pre-Installation Information for Service Reporting on Sun Solaris."



Third, follow the installation procedures for the installation option setup you choose. For more installation details, turn to Chapter 3, "Installing Service Reporting on Windows NT and Windows 2000" or Chapter 5, "Installing Service Reporting on Sun Solaris."



Fourth, read and follow the configuration procedures. Once you complete this step, you're ready to begin generating reports. For more configuration details, turn to Chapter 6, "Configuring Service Reporting".



Finally, BMC Software recommends that you read "Related Documentation" on page B-1, and use the Reporting Online Help as you work with Service Reporting.

Pre-Installation Information for Service Reporting on Windows NT and Windows 2000

This chapter describes pre-installation recommendations and tasks for Service Reporting on Windows NT and Windows 2000 and contains the following topics:

Pre-installation Recommendations and Tasks	2-2
Pre-installation Recommendations	2-2
Pre-installation Requirements	2-3
Pre-installation Tasks	2-9

Pre-installation Recommendations and Tasks

This section describes pre-installation recommendations and tasks.

Pre-installation Recommendations

Service Reporting contains many different components. To successfully install them, perform the following tasks:

- Log on to the local computer using the user account created for PATROL. If one does not exist, add one using the Start Menu => Programs => Administrative Tools => User Manager (for Domains). You need to do this from an administrator's account on the local computer.
- Make sure Oracle is *not* installed on the computer where DataStore will be installed. If the Report Server computer already has an Oracle 8.1.7 or newer client installed, do not install the DataStore Client there.
- Create a disk image of your computer drives once you satisfy the software pre-requisites before installing Service Reporting. If you have problems, you can quickly and easily restore the original image.
- Make sure PATROL is installed. Service Reporting assumes familiarity with PATROL. As a standalone product, Service Reporting can operate without PATROL. However, if you want to collect data you must have PATROL Agents installed.
- In addition to the PATROL home directory set up when you install PATROL, BMC Software recommends setting up a separate directory to install Reporting and database components. Because of PATROL dependencies, you must install the Aggregator and retrievers in the PATROL home directory.
- Make sure you are licensed for the Knowledge Modules associated with the Solution Reports you wish to install and use.
- Read the Readme First System Setup Notes found in the kit with your CD. It details the software you need to install and upgrade before installing Service Reporting components.

Pre-installation Requirements

Use the following table as a tool for preparing your computer to install Service Reporting.

Table 2-1 Pre-installation Requirements Check List

Check Here	When You Complete the Following Task
	Read the Service Reporting Release Notes found in the kit with your CD.
	Stop system services before installing Service Reporting (see page 2-12).
	If you are migrating from an earlier version of Service Reporting, migrate your QuickReport Editor reports and Solution reports. See the Service Reporting Release Notes for report migration information on Windows and Unix.
	Verify the necessary hardware and software (see page 2-4) needed to successfully install and run Service Reporting.
	Determine where you want to install Service Reporting components.
	Validate your PATROL environment (see page 2-10).
	Set up a separate PATROL directory for the Reporting and Database Components.
	Upgrade system DLLs (see 2-12). If you are running a Windows 2000 machine your system DLLs are already at the version 6 level.
	Verify that the Windows NT and Windows 2000 challenge response security mechanism is turned off in the IIS Security Configuration (see page 2-13).

Hardware and Software Requirements

Use the following tables to verify that you have the correct hardware and software levels to optimize the performance of Service Reporting.

Hardware Requirements

The following tables outline the various hardware requirements for the different components of Service Reporting. Table 2-2 shows the minimum and recommended hardware requirements for running DataStore.

Table 2-3 outlines the hardware requirements for running the Report Server on a different computer than the computer running DataStore. If you are running them on the same machine, take that into account when calculating your system hardware requirements.

Table 2-4 outlines the hardware requirements for running all Service Reporting components on one computer.

Table 2-2 DataStore Hardware Requirements

Component	Minimum Recommended	
CPU	350 MHz Intel-compatible	500 MHz Intel-compatible
Memory	512 MB RAM	1024 MB RAM
Storage	10 GB Disks	20 GB Disks

Table 2-3 Reporting Hardware Requirements

Component	Minimum	Recommended
CPU	350 MHz Intel-compatible	500 MHz Intel-compatible
Memory	1024 MB RAM	2048 MB RAM
Storage	4 GB Disks	8 GB Disks

Table 2-4 Hardware Requirements for Running All Service Reporting Components on One Computer

Component	Minimum Recommended	
CPU	400 MHZ Intel-compatible	Two 500 MHz Intel-compatible
Memory	1024 MB RAM	2048 MB RAM
Storage	20 GB Disks	40 GB Disks

The data aggregator must be running on a computer that has at least 128 MB RAM with a network connection to the DataStore.

Software Requirements

Table 2-5 outlines the software requirements for the different components of Service Reporting.

Table 2-5 Service Reporting Software Requirements

Component	Software	Version	
DataStore	Microsoft Windows NT Server Sun Sparc Solaris	4.0, Service Pack 4 or later 2.7 or later	
Data Aggregator &	PATROL® Console	3.4.00 or later	
Retrievers	PATROL® Agent	3.4.00 or later	
	Microsoft IIS Web Server	4.0 (NT), 5.0 (Windows 2000)	
Reporting Components	Microsoft Internet Explorer	5.0 or later	
	Netscape Browser	4.5 or later (excluding 6.x)	
	Sun JRE Plug-In	1.3	

Browser Requirements

Service Reporting includes a QuickReport Editor that you can use to create report templates based on several generic report types. The QuickReport Editor requires a Web browser, Internet Explorer, or Netscape Communicator.

Both browsers require the use of the Sun Java 1.3 Plug-in. For more information, see "Java Plug-in Download Issue with Internet Explorer" on page 2-6 and "Java Plug-in Download Issue with Netscape" on page 2-6.

You can use Microsoft Internet Explorer, version 5.0 or Netscape Communicator version 4.5 or later. Although you can use the QuickReport Editor with earlier versions of Internet Explorer, BMC Software does not recommend or support this.

----- Note -

Service Reporting version 1.2.00 does not support Netscape 6.x.

To access the QuickReport Editor, use the following URL, where <server-name> is the name of the computer where both the Report Server and the Web Server are installed:

http://server-name/acweb/server-name

- Note —

You must install Microsoft IIS on the computer where you install the Report Server.

Java Plug-in Download Issue with Internet Explorer

If the Java Plug-in fails to download and install on Internet Explorer, turn off execute privileges for the directory in which you are putting the Java Plug-in Software executable.

Java Plug-in Download Issue with Netscape

You can use the QuickReport Editor with Netscape Communicator version 4.5 or later, as long as you install the Sun JRE Plug-in, version 1.3, available on the web site specified on the Service Reporting CD.

- Note -

Service Reporting version 1.2.00 does not support Netscape 6.x.

Service Reporting Components in a Windows NT and Windows 2000 Environment

The following table recommends locations for installing the various Service Reporting components. The table makes the following assumptions:

- The PATROL Console is already installed on the computer identified in the table as the Windows NT and Windows 2000 Console.
- PATROL Agents are already installed on all of the Windows NT and Windows 2000 computers (Console, Server, Managed).
- You will install retrievers and Aggregators on the same computers and same directory with PATROL Agents.
- You have a separate PATROL directory for installing the reporting and database components.
- If the Windows NT and Windows 2000 Server is managing itself, it will have a retriever on it.

Note —
The QuickReport Editor is not an installation option. It is automatically
installed when you install other Reporting components.

Table 2-6 Option 1 - Installing Service Reporting Components in an Windows NT and Windows 2000 Environment

	On the Destination Computer				
To Install the following Service Reporting Component	Use the Following Installation Option	Windows NT and Windows 2000 Console	Windows NT and Windows 2000 Server	Managed Computers (Window NT and Windows 2000 or Unix)	Client Computer
DataStore Console		~	V		
Aggregator Console KM		V			
Retrievers Console KM	Install Data	V			
Retrievers	Collection Components			v	
Data Aggregator	Components			✓ (Windows NT and Windows 2000 only)	
Administrator Desktop		V			~
Report Server for Windows NT			V		
Solution Reports			~		
Web Agent	Install		V		
Reporting Studio	Reporting Components	~	~	✓ (Windows NT and Windows 2000 only)	•
Reporting Portal			~		
Publisher/Zone Index]		~		
JRE 1.3.1 for the Reporting Portal			~		
DataStore Server and DataStore Client	Install Database Components		~		

Pre-installation Tasks

You must perform the following tasks before you install Service Reporting components in a Windows NT and Windows 2000 environment.

- Validate your PATROL Environment (see "Validating Your PATROL Environment" on page 2-10)
- Upgrade System DLLs (see "Upgrading System DLLs to Version 6" on page 2-12)
- Disable Windows NT Challenge/Response ("Disabling Windows NT Challenge/Response Authentication" on page 2-13)

Validating Your PATROL Environment

You need access to a PATROL Console to:

- Discover PATROL Agents
- Configure, start, and stop retrievers and data aggregators
- Troubleshooting purposes

To Validate Your PATROL Environment

Verify that you have PATROL Agents and accounts on the computers where you want to install the data aggregators and retrievers for DataStore. You can use the PATROL Console to add the target hosts to the PATROLMainMap view of the Console.

	You must install data collection components (aggregators and retrievers) in the PATROL home directory, that is, the directory you installed PATROL into (for example D:\PATROL3-4).
Step 1	From the PATROL Console, choose Hosts => Add .
	Note
	You can use a Developer Console or an Operator Console.

- **Step 2** You will be prompted for the appropriate connection and user ID information. Use
 - Operator
 - TCP
 - User-specified name and password

If PATROL is properly installed, you will have the appropriate PATROL account and permissions.

Step 3 If you don't have the proper permissions, you will be prompted to log off and then log on again. You should then have the accounts and

permissions you need accessed from the Windows NT User Manager for Domains. The accounts and permissions are:

- Log on as a Service (required for Actuate Report Server also)
- Act as part of OS
- Increase quotas
- Profile system performance
- Replace a process level token
- Log on locally
- Debug programs

N	O	te

BMC Software recommends installing the DataStore Console on or near the same computer where the PATROL Console is installed.

Upgrading System DLLs to Version 6

Note —

If you are running a Windows 2000 machine your system DLLs are already at the version 6 level.

Service Reporting requires that you run the script **upgradeDLL.bat** to upgrade system DLLs to version 6 before you install the product. The script is located on the Service Reporting – Microsoft Windows NT Server CD in the DLLUpgrade directory.

The utility attempts to upgrade the following DLLs in %SYSTEMROOT%\system32\:

- msvcirt.dll
- msvcrt.dll
- mfc42.dll

The utility checks the version of the system DLLs. The DLLs from the utility are only copied to the system if the DLL in the utility is a newer version than that of the DLL on the system.

Original DLLs are copied to **filename.dll.old** in their original location. You can rename these files to their original name to restore the machine to its previous state. You *must* restart the system after restoring these files.

Disabling Windows NT Challenge/Response Authentication

This section includes information on checking and changing the Windows NT Challenge/Response settings on Internet Information Server 4.0 (IIS4).

Disabling Windows NT Challenge/Response authentication is a Web Server requirement before using the Service Reporting Report Server component. Otherwise, access to the Report Server over the Web becomes a problem since the Web Desktop does not start.

Disabling Windows NT Challenge/Response Authentication in IIS4

To disable Windows NT Challenge/Response authentication on IIS4, complete the following steps from the Internet Service Manager of the Microsoft Management Console:

- Step 1 Choose Start => Programs => Windows NT 4.0 Option Pack => Microsoft Internet Information Server => Internet Service Manager.
- Step 2 Right-click the **Default Web Site** associated with the server where you intend to install the Service Reporting Report Server, and click **Properties**.
- Step 3 When the Default Web Site Properties dialog box is displayed, click the Directory Security tab and click Edit in the Anonymous Access and Authentication Control section.
- Step 4 On the Authentication Methods dialog box, make sure that Windows NT Challenge/Response is not selected. If the Windows NT Challenge/Response check box contains a check mark, click the check mark to remove it. Then, click OK.

Disabling Windows NT Challenge/Response Authentication in IIS5

To disable Windows NT Challenge/Response authentication on IIS5, complete the following steps from the Internet Service Manager of the Microsoft Management Console:

- **Step 1** Choose **Start** => **Programs** => **Administrative Tools** => **Internet Services Manager** => **Internet Service Manager**.
- **Step 2** Click the node name to expand it.
- **Step 3** Right-click on the Default Web Site and go to Properties Page.
- **Step 4** Click the Directory Security tab.
- **Step 5** Click Edit under the Anonymous access and authentication control.
- **Step 6** Ensure that Anonymous access and basic authentication are the only selections enabled.

Installing Service Reporting on Windows NT and Windows 2000

This chapter describes the procedure for installing Service Reporting on Windows NT and Windows 2000 and contains the following topics:

Installation Overview			 		 						3-2
Installation			 		 						3-4
Uninstalling Service Reporting			 		 						3-29

Introduction

Since every production environment is unique, it is impossible to describe every possible configuration. You are the most knowledgeable person when it comes to where you want your consoles (DataStore and PATROL), Report Server, DataStore (database and client), and Web client components installed to optimize productivity and response time. This chapter provides guidelines and recommendations for configuring your system in a Windows NT and Windows 2000 environment.

The installation program is wizard-driven, making it easy for you to install all or some components on console and agent computers. You can also run the installation program non-interactively (silently). For additional information see Step 8 on page 3-28.

Installation Overview

- Note

Although it is a stand-alone product, Service Reporting installation is a subset of the overall PATROL installation. However, Service Reporting requires that you install PATROL. To do so, consult the appropriate Getting Started book for that component.

The chapter is organized in three sections

- Installation
- Installation verification
- Uninstalling

You use the installation program to install Service Reporting to the Windows NT and Windows 2000 computer you are currently logged onto, or as a network installation on computers that are members of your local domain. The installation program lets you install Service Reporting components on one Windows NT computer or onto multiple computers at one time, including your other computer.

Note -

If you are migrating from an earlier version of Service Reporting, you *must* unschedule existing Solution Reports, install the product, run the utilities that migrate the Solution Reports from version 1.1.20 to 1.2.00, reschedule the reports. See the Service Reporting Release Notes for a description of the migration utilities.

Installation

This section describes general installation recommendations and installation procedures.

General Installation Recommendations

- BMC Software recommends installing the PATROL[®] Console nearby but not on the computer where the DataStore and Report Server will be installed. This reduces resource consumption issues.
- Install DataStore and Report Server on a computer that is running a clean Windows NT and Windows 2000 4.0 Server with Service Pack 4 or later.
- Verify that the DNS is properly configured in the domain you intend to use. If you are using host names instead, make sure the host names on the Aggregator nodes are the same as the names on the DataStore Console. See the *DataStore Administrator Guide* for more information.
- Login as a local administrator account. A domain administrator account does not have sufficient permissions.
- Use the CD to install all Service Reporting components locally when possible.
- Use remote installation for retrievers and aggregators when installing to multiple hosts.
- In a high capacity production environment, BMC Software recommends installing the Report Server and the DataStore database on separate servers.
- To optimize performance and minimize the installation time required, BMC Software recommends installing everything, *except* retrievers, locally when possible.

Installing Service Reporting

The Service Reporting installation program for Windows NT and Windows 2000 divides the installation into three sections. You can install the components in any order you choose. Each section installs specific components of Service Reporting.

Install Data Collection and DataBase Components
Perform collection, manipulation, and monitoring of data.
Components include: Retrievers Console KM, Aggregator Console KM, DataStore Console, Retrievers, and Data Aggregators.

Installs the DataStore client only or the DataStore Server and DataStore Client. The DataStore client enables communication between the Report Server and the DataStore.

Install Reporting Components
 Customizes report templates and view pre-defined reports.
 Components include: Reporting Clients, Web Agents, the Report Server, QuickReports, and pre-defined Solution Reports.

Installing Data Collection and Database Components

This task installs the Service Reporting components that perform data collection, manipulation, and monitoring. The components include Retrievers and Aggregator Console KMs and the DataStore Console. For a list of data collection components, see the "Windows NT and Windows 2000 Installation Component List" on page C-2.

This task also installs the database components ("DataStore Server and DataStore Client") on the Windows NT and Windows 2000 Server computer on which the Report Server is installed. For more information on the database components, see the "Windows NT and Windows 2000 Installation Component List" on page C-2.

- Tip

As you answer the installation prompts, keep in mind that the installation pages are the same whether your are installing the application locally or whether you want to export the installation to another machine and install it there. At the end of the installation prompts, you can zip up the installation and export it to another machine for a remote or "silent" install.

To Install Data Collection Components

- Step 1 Insert the Service Reporting DataStore CD into the CD-ROM drive and double-click setup.exe to run the installation utility to display the Welcome to the Installation Utility page.
 - **1.A** If the installation program does not start automatically, use one of the following methods to open the PATROL NT Installation Launcher dialog box:
 - From Windows Explorer, select your CD-ROM drive, and then double-click **setup.exe** to start the installation program.

Or

- From the Start menu, choose **Run**, and enter the following command: **D:\setup.exe** if **D:** is your CD-ROM drive. The PATROL NT Install Launcher appears.
- **1.B** If the PATROL Windows NT Install Launcher starts automatically, click Install Service Reporting.
- Step 2 On the Welcome to the Installation Utility page, click Next to display the Review License Agreement page.

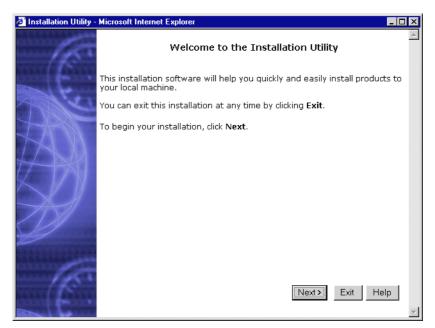
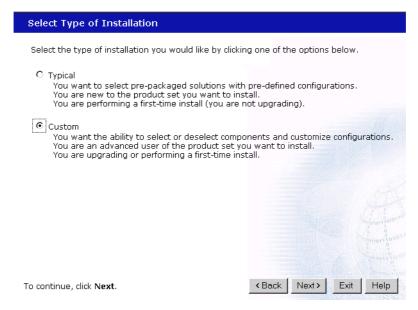


Figure 3-1 Welcome to the Installation Utility Page

Step 3 On the Review License Agreement page, click **Accept** to continue with the installation and click **Next** to display the Select Type of Installation page.

Figure 3-2 Select Type of Installation Page



Step 4 On the Select Type of Installation page, click **Typical** or **Custom** and then **Next** to display the Specify Installation Directory page.

Note -

The **Typical** install path offers a quick installation path with fewer panels, and uses default specifications. The **Custom** path offers you greater control over your installation configuration. Choose the **Typical** path if you are installing the product for the first time, or are new to the product. Choose the **Custom** installation path if you are an advanced user and want to customize the installation configuration. For the purposes of this example, the **Custom** installation path is described.

Specify Installation Directory

Specify the installation directory for your BMC products, or use the default shown.

BMC Products Installation Directory

C\Program Files\BMC Software

Figure 3-3 Specify Installation Directory Page

Step 5 On the Specify Installation Directory page, specify the location where you want to install Service Reporting in the BMC Products Installation Directory field. The default directory is C:\Program Files\BMC Software. When finished, click Next to open the Select Products and Components to Install page.

The tree below lists the products and components you can install. Items listed as QuickStart packages contain pre-packaged products and components with pre-defined configurations. Expand the tree to select one or more products, components, or QuickStart packages. Rroduct Selection 🚊 🖼 PATROL Service Reporting 🍯 🗹 Aggregator 퍨 🗹 DataStore Console 🚊 🖨 🗖 DataStore 🎒 🛭 🗆 DataStore Client Only 🖷 🛭 DataStore Instance DataStore Server and DataStore Client 彈 🔲 Migrate DataStore Server/Instance to Release 1.2 Retrievers 🖶 👊 Service Reporting PATROL Console KMs 🎒 🗹 Aggregator Console KM 彈 🗹 Retrievers Console KM 989 MR Disk Space Next> Help < Back

Figure 3-4 Select Products and Components to Install Page

Step 6 On the Select Products and Components to Install Page, expand all trees and select all boxes. If you want to install retrievers remotely, BMC Software recommends a separate pass using Export (see "To Install Data Aggregator and Retrievers" on page 3-22). Click Next to display the Service Reporting Family Product Installation Directory page.

Note —

For existing users this is the point at which you migrate the DataStore database. To do so, select Migrate DataStore Server/Instance to Release 1.2.

Warning	4
vvaiiiii	4

When you are installing the Report Server and DataStore on one computer, do not install both database component options ("DataStore Client Only" and "DataStore Server and DataStore Client"). Doing so results in problems using the DataStore Server. Select only the "DataStore Server and DataStore Client" option.

- Note -

You must install data collection components (aggregators and retrievers) in the PATROL home directory, that is, the directory you installed PATROL into (for example **D:\PATROL3-4**). BMC Software recommends installing reporting and database components into separate directories. This makes it easier to maintain an audit trail or uninstall these components.

Installation Utility - Custom Path - Microsoft Internet Explorer

Provide Service Reporting Family Product Installation Directory

PATROL Product Installation Directory

Patrol3

PATROL Agent Login Name

jbrs

PATROL Agent Login Password

To continue, click Next.

Figure 3-5 Service Reporting Family Product Installation Directory Page

Step 7 On the Service Reporting Family Product Installation Directory page, specify the PATROL Product Installation Directory.

You must install these components in the PATROL home directory, that is, the directory you installed PATROL into (for example **D:\PATROL3-4**). If you have installed PATROL 3.4.11 you must append "-4" to Patrol3. If you have installed PATROL 3.5, you can use the default directory Patrol3.

Step 8 Specify the PATROL Agent login name and password. Click **Next** to display the Review Selections and Install page.

If the user who will own the Report Server services is defined as a domain user, rather than a machine-local user, then you must prefix the userid with <domain_name> and a backslash, for example,

Table 3-1 PATROL Default Account Information

BMC.COM\username.

Field	Description
Account Name	Enter the account name you are using to install Service Reporting.
Password	Enter the password you are using to install Service Reporting.

Figure 3-6 Review Selections and Install Page

Sole	ections							
DataStore Server and DataStore Client	eccions							
Retrievers Console KM								
Aggregator Console KM								
Retrievers								
DataStore Console								
Aggregator								
Product	Questions							
Question		Answer						
BMC Products Base Directory	C:\Progran	C:\Program Files\BMC Software						
PATROL Agent Login Name	jbos	jbos						
PATROL Product Installation Directory Patrol35								
Disk space f	for Installation							
Disk Space Available	986 MB							
Disk Space Required	1356 MB							
Export packages to this directory								
· · · -								

- **Step 9** On the Review Selections and Install page, review your selections and click **Install**.
- **Step 10** Watch the Installation Status page to verify that the Service Reporting installation process completes successfully. When the installation is complete, click **Next**.
- Step 11 On the SUCCESS page, click View Log File to review the installation log file. When you are done, click Finish. The DataStore components are now installed on your system.

Installing Reporting Components on the Windows NT and Windows 2000 Server

This task installs the reporting components of Service Reporting. Reporting components let you create and view custom reports from report templates using the QuickReport Editor or pre-defined Solution reports. Some of the components included in this section are QuickReports, Solution Reports, and Report Server. For more information on reporting components, see the "Windows NT and Windows 2000 Installation Component List" on page C-2.

To Install Reporting Components

- Step 1 Insert the Service Reporting CD into the CD-ROM drive and double-click setup.exe to run the installation utility to display the Welcome to the Installation Utility page.
 - **1.A** If the installation program does not start automatically, use one of the following methods to open the PATROL NT Installation Launcher dialog box:
 - From Windows Explorer, select your CD-ROM drive, and then double-click **setup.exe** to start the installation program.

Or

- From the Start menu, choose **Run**, and enter the following command: **D:\setup.exe** where **D:** is your CD-ROM drive. The PATROL NT Install Launcher appears.
- **1.B** If the PATROL Windows NT Install Launcher starts automatically, click Install Service Reporting.
- **Step 2** On the Welcome to the Installation Utility page click **Next** to display the Review License Agreement page.

Welcome to the Installation Utility

This installation software will help you quickly and easily install products to your local machine.

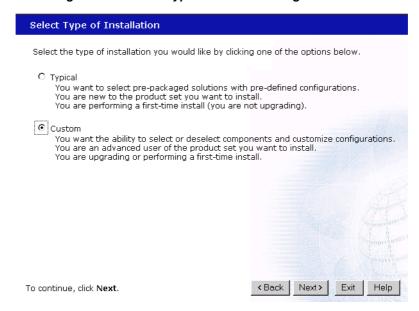
You can exit this installation at any time by clicking Exit.

To begin your installation, click Next.

Figure 3-7 Welcome to the Installation Utility Page

Step 3 On the Review License Agreement page, click **Accept** to continue with the installation and click **Next** to display the Select Type of Installation page.

Figure 3-8 Select Type of Installation Page



Step 4 On the Select Type of Installation page, click **Typical** or **Custom** and then **Next** to display the Specify Installation Directory page.

Note -

The **Typical** install path offers a quick installation path with fewer panels, and uses default specifications. The **Custom** path offers you greater control over your installation configuration. Choose the **Typical** path if you are installing the product for the first time, or are new to the product. Choose the **Custom** installation path if you are an advanced user and want to customize the installation configuration. For the purposes of this example, the **Custom** installation path is described.

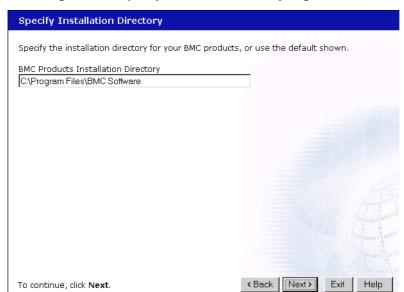
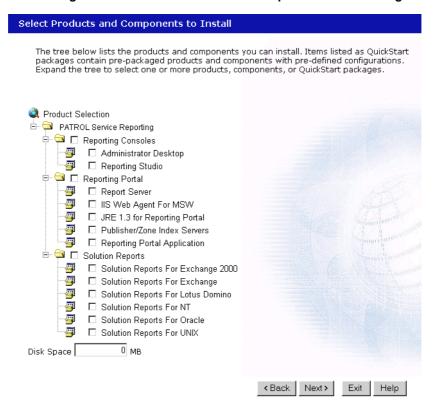


Figure 3-9 Specify Installation Directory Page

Step 5 On the Specify Installation Directory page, specify the location where you want to install Service Reporting in the BMC Products Installation Directory field. The default directory is C:\Program Files\BMC Software. When finished, click Next to open the Select Products and Components to Install page.

Figure 3-10 Select Products and Components to Install Page



Step 6 On the Select Products and Components to Install Page, expand all trees and select all boxes. Click **Next** to display the Provide Service Reporting Directory and Account Information page.

Note -

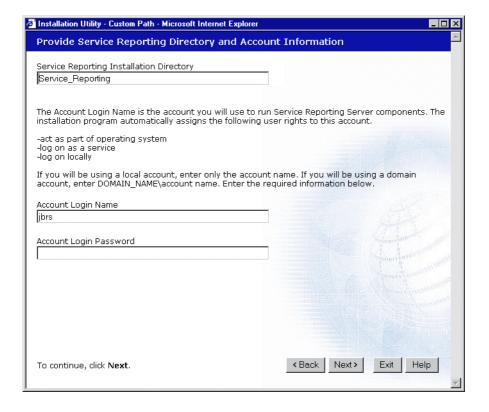
The QuickReport Editor is not an installation option. It is automatically installed when you install other Reporting components.

To speed installation, only install the Solution Reports for the Knowledge Modules (KMs) for which your site is licensed to collect data.

- Note -

If you have installed some Solution Reports and at a later time wish to install additional Solution Reports, the Report Server must be installed and running.

Figure 3-11 Provide Service Reporting Directory and Account Information Page



Step 7 On the Provide Service Reporting Directory and Account Information page, specify the Service Reporting Installation Directory (if other than

the default) and the Account Login Name and Password. Click **Next** to display the Review Selections and Install page.

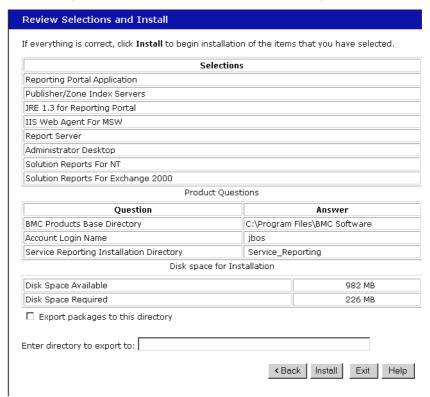


Figure 3-12 Review Selections and Install Page

- **Step 8** On the Review Selections and Install page, review your selections and click **Install**.
- **Step 9** Watch the Installation Status page to verify that the Service Reporting installation process completes successfully. When the installation is complete, click **Next**.
- Step 10 On the SUCCESS page, click View Log File to review the installation log file. When you are done, click Finish. The Reporting components are now installed on your system.

Installing Data Aggregators and Retrievers

This task installs the data collection components (data aggregators and retrievers) on managed computers where PATROL Agents have already been installed. You can install retrievers on Windows NT and Windows 2000 or Unix computers.

----- Note -

BMC Software recommends installing reporting and database components into separate directories.

Use the PATROL account for retrievers when installing the data collection components on the agent computers (these installs are done remotely on each agent computer).

To Install Data Aggregator and Retrievers

Step 1 Log on to the managed computer using the user-specified name and password.

----- Note --

You must install data collection components (aggregators and retrievers) in the PATROL home directory, that is, the directory you installed PATROL into (for example **D:\PATROL3-4**). BMC Software recommends setting up a directory separate to install other data collection components due to file and size management issues.

- Step 1 Insert the Service Reporting CD into the CD-ROM drive and double-click setup.exe to run the installation utility to display the Welcome to the Installation Utility page.
 - **1.A** If the installation program does not start automatically, use one of the following methods to open the PATROL NT Installation Launcher dialog box:
 - From Windows NT Explorer, select your CD-ROM drive, and then double-click **setup.exe** to start the installation program.

Or

- From the Start menu, choose **Run**, and enter the following command: **D:\setup.exe** where **D:** is your CD-ROM drive. The PATROL NT Install Launcher appears.
- **1.B** If the PATROL Windows NT Install Launcher starts automatically, click Install Service Reporting.
- Step 2 On the Welcome to the Installation Utility page, click Next to display the Review License Agreement page.

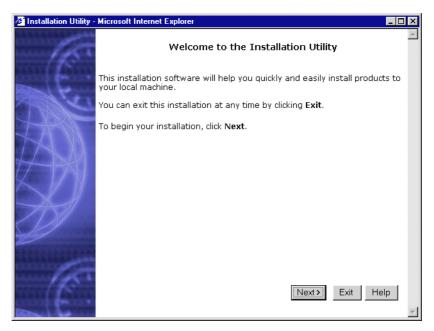
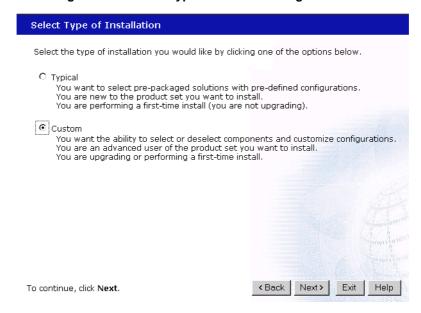


Figure 3-13 Welcome to the Installation Utility Page

Step 3 On the Review License Agreement page, click **Accept** to continue with the installation and click **Next** to display the Select Type of Installation page.

Figure 3-14 Select Type of Installation Page



Step 4 On the Select Type of Installation page, click **Typical** or **Custom** and then **Next** to display the Specify Installation Directory page.

Note -

The **Typical** install path offers a quick installation path with fewer panels, and uses default specifications. The **Custom** path offers you greater control over your installation configuration. Choose the **Typical** path if you are installing the product for the first time, or are new to the product. Choose the **Custom** installation path if you are an advanced user and want to customize the installation configuration. For the purposes of this example, the **Custom** installation path is described.

Specify Installation Directory

Specify the installation directory for your BMC products, or use the default shown.

BMC Products Installation Directory

C:\Program Files\BMC Software

To continue, click Next.

Figure 3-15 Specify Installation Directory Page

Step 5 On the Specify Installation Directory page, specify the location where you want to install Service Reporting in the BMC Products Installation Directory field. The default directory is C:\Program Files\BMC Software. When finished, click Next to open the Select Products and Components to Install page.

Select Products and Components to Install

The tree below lists the products and components you can install. Items listed as QuickStart packages contain pre-packaged products and components with pre-defined configurations. Expand the tree to select one or more products, components, or QuickStart packages.

Product Selection

PATROL Service Reporting

Aggregator

DataStore

DataStore

Migrate DataStore Server/Instance to Release 1.2

Retrievers

Service Reporting PATROL Console KMs

Disk Space

39 MB

Figure 3-16 Select Products and Components to Install Page

Step 6 On the Select Products and Components to Install Page, expand all trees and select all boxes. Select Aggregators and Retrievers. Click **Next** to display the Service Reporting Family Product Installation Directory page.

Installation Utility - Custom Path - Microsoft Internet Explorer

Provide Service Reporting Family Product Installation Directory

PATROL Product Installation Directory

Petrol3

PATROL Agent Login Name

jibrs

PATROL Agent Login Password

To continue, click Next.

Figure 3-17 Service Reporting Family Product Installation Directory Page

Step 7 On the Service Reporting Family Product Installation Directory page, specify the PATROL Product Installation Directory (if other than the default) and the PATROL Agent login name and password. Click Next to display the Review Selections and Install page.

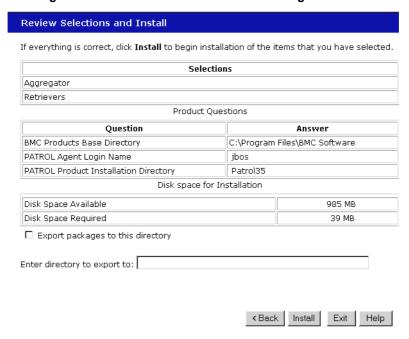
Note -

You must install these components in the PATROL home directory, that is, the directory you installed PATROL into (for example **D:\PATROL3-4**).

Table 3-2 PATROL Default Account Information

Field	Description
Account Name	Enter the account name you are using to install Service Reporting.
Password	Enter the password you are using to install Service Reporting.

Figure 3-18 Review Selections and Install Page



- Step 8 On the Review Selections and Install page, review your selections. Optionally, check Export packages to this directory, enter the full pathname to the computer where you want the installation package exported, and click Export.
- **Step 9** Watch the Installation Status page to verify that the PATROL for Performance installation process completes successfully. When the installation is complete, click **Next**.

Step 10 On the SUCCESS page, click View Log File to review the installation log file. When you are done, click Finish. The Perform Agent and System Collectors are now installed on your agent computer.

Verify the destination directory to determine if it is different from the previous two steps (for example **D:\PATROLDATASTOREKM**). You can modify it to be consistent with the previous two steps or use the default.

Note -

It is not necessary to restart the managed computer after the retriever installation.

Installation Verification

There are diagnostic tests you can run as long as you have a Web Server up and running. These tests can assist you when troubleshooting Service Reporting installation as well as operation. Run the diagnostic tests before calling Customer Support.

Go to the following URL, *machinename*/bmcscripts/installverificationhtml/installverification.html, and select the diagnostic tests you want to run.

Uninstalling Service Reporting

This section describes how to uninstall Service Reporting components from Windows NT and Windows 2000 computers.

Uninstalling Service Reporting Components

To uninstall Service Reporting components:

- Step 1 Choose Start => Settings => Control Panel and double-click Add/Remove Programs. The Add/Remove Programs Properties dialog box opens.
- Step 2 Select BMC Software and click Add/Remove. The BMC Installation Utility opens and the Welcome to Installation Utility Uninstall Mode is displayed.
- Step 3 On the Welcome to Installation Utility Uninstall Mode page, click Next to display the Select Type of Uninstall page.
- Step 4 Select Selected Products, and click Next to display the Specify Installation Directory page.
- **Step 5** Verify the directory path, and click **Next** to display the Select Products and Components to Uninstall page.
- Step 6 Select the components you wish to uninstall, and click Next to display the Review Selections and Uninstall page.
- **Step 7** Click **Uninstall** to display the Uninstall Status page.
- Step 8 Watch the Uninstall Status page to verify that the process is complete. When it has completed, click Next.
- Step 9 On the SUCCESS! page, click View Log File to review the installation log file. When you are done, click Finish to re-open the Add/Remove Programs Properties dialog box.
- **Step 10** Click Cancel to close the dialog box.

Pre-Installation Information for Service Reporting on Sun Solaris

This chapter describes the pre-installation recommendations and tasks for for installing Service Reporting on a Sun Solaris computer, and contains the following topics:

Pre-installation Recommendations and Tasks	4-2
General Pre-installation Recommendations	4-2
DataStore Pre-installation Tasks	4-6
Sun Solaris Pre-installation Tasks and Requirements	4-11

Pre-installation Recommendations and Tasks

Before you install Service Reporting make sure your environment conforms to the pre-installation recommendations and perform the pre-installation tasks described in the following sections:

- General Pre-installation recommendations (page 4-2
- DataStore Pre-installation tasks (page 4-6)
- DataStore Pre-installation tasks (page 4-11)

General Pre-installation Recommendations

Service Reporting contains many different components. To successfully install them, perform the following tasks:

- Make sure PATROL is installed. Service Reporting assumes familiarity with PATROL.
- Log on to the local computer using the user account created for PATROL. You need to do this from an administrator's account on the local computer.
- Make sure Oracle is *not* installed on the computer where DataStore will be installed. If the Report Server computer already has an Oracle 8.1.5 or newer client installed, do not install the DataStore Client there.
- Create a disk image of your computer drives once you satisfy the software pre-requisites for installing Service Reporting. If you have problems, you can quickly and easily restore the original image.
- Make sure you are licensed to collect data for the Knowledge Modules associated with the Solution Reports you wish to install and use.
- Read the Read Me First System Setup Notes found in the kit with your CD. It details the software you need to install/upgrade before installing Service Reporting components.
- When installing Service Reporting the first time, BMC Software recommends setting the log level to debugging in the PATROL Console.
- Verify the operating system, hardware and software requirements.

Validating Your PATROL Environment

You need access to a PATROL Console to:

- Discover PATROL Agents
- Configure, start, and stop retrievers and data aggregators

To Validate Your PATROL Environment

Verify that you have PATROL Agents and accounts on the computers where you want to install the data aggregators and retrievers for DataStore. You can use the PATROL Console to add the target hosts to the PATROLMainMap view of the Console.

Step 1	From the PATROL Console, choose Hosts => Add .		
	Note —		
	You can use a developer console or an operator console.		

- **Step 2** You will be prompted for the appropriate connection and user ID information. Use
 - Operator
 - TCP
 - User-specified name and password

If PATROL is properly installed, you will have the appropriate PATROL account and permissions.

Verifying Operating System Software Requirements

To install Oracle8i products included with this release, your Sun SPARC Solaris system must meet the operating system requirements listed in Table 4-1.

Table 4-1 Operating System Software Requirements

OS Requirements	Requirements
Operating System	Solaris 2.6, 2.7, or 2.8. If you are installing DataStore on this system you must be running version 2.7 or later.
Operating System Patch	Use the latest kernel patch from Sun Microsystems. Sun provides patch information at:
	http://sunsolve.sun.com/ Solaris 2.6 requires at least kernel jumbo patch revision #105181-15 for successful installation of Release 3 (8.1.7).
Operating System Packages	SUNWarc, SUNWbtool, SUNWhea, SUNWlibm, SUNWlibms, SUNWsprot, SUNWtoo
Window Manager	X-windows must be installed on the system from where the Installer is run. Use any Sun-supported X-windows server, for example, dtwm, twm, olwm, that supports Motif.
	Character mode installs are not supported for Release 3 (8.1.7).
Required Executables	The following executables must be present in the /usr/ccs/bin directory: make, ar, ld, nm.

Operating System Verification Commands

Table 4-2 lists the Sun Solaris installation prompts and descriptions.

Table 4-2 Sun Solaris Installation Prompts

Command	Description
\$ uname -a	To determine your current operating system information.
\$ showrev -p	To determine which operating system patches are installed.
\$ pkginfo -i [package_name]	To determine which operating system packages are installed. If you enter pkginfo -i, all installed packages are listed.
\$ xclock	To determine if your X-windows system is working properly on your. If a clock is not displayed on your screen, X-windows is not configured correctly. See "DISPLAY" for instructions on configuring X-windows.
\$ /usr/bin/which make \$ /usr/bin/which ar \$ /usr/bin/which Id \$ /usr/bin/which nm	To determine if you are using the correct system executables. Each command should point to the /usr/ccs/bin directory. If not, add /usr/ccs/bin to the beginning of the PATH environment variable in the current shell. See "PATH" for instructions on setting the PATH variable.
\$ ulimit -S	To check current soft shell limits. Oracle8i Release 3 (8.1.7) includes native support for files greater than 2 GB. Check your shell to determine whether it will impose a limit.
\$ ulimit -Ha	To check maximum hard limits. The file (blocks) value should be multiplied by 512 to obtain the maximum file size imposed by the shell. A value of unlimited is the operating system default and is the maximum value of 1 TB.

DataStore Pre-installation Tasks

Note —

There are several task associated with installing Oracle on Sun Solaris.

For the Solaris installation you should be in the Korn shell.

- Verify that Netscape is in your current path.
- Make sure your LD_LIBRARY_PATH includes /usr/lib and /usr/openwin/lib for Netscape to come up.
- Set your DISPLAY environment variables.
- Create a separate User and Group to administer DataStore (see "Creating a Separate User and Group to Install the DataStore" on page 4-7).
- Tune kernel parameters (see "Tuning Kernel Parameters on Sun Solaris" on page 4-8).
- Apply the required Solaris patches (see "Applying Sun Solaris Patches to Run Service Reporting Aggregators" on page 4-12).
- Validate your PATROL environment (see "Validating Your PATROL Environment" on page 4-3).

Creating a Separate User and Group to Install the DataStore

BMC Software recommends creating a separate user ID and group to install and administer the DataStore Server. You can use existing users and groups, but do not use the **root** user.

----- Note --

The user ID for the installation must use **oradba** as the group name.

The following steps assume you are adding a new group and user for installation and administration.

Step 1 Use the existing oradba group or create a new group (as root user) called oradba to put the DataStore Unix user in for administration and installation.

To create a new group called **oradba**, use the **groupadd oradba** command.

On Solaris, you can use the Solaris administration tool **Adding new groups**.

Step 2 Add the user ID that you intend to use for administering the DataStore Server to oradba. Use the Solaris administration tool to add the user ID to the appropriate group or as root edit /etc/group by adding user to oradba group

If you created a new user for the DataStore, login as that user and use the **newgrp oradba** command to be an active member of the **oradba** group.

Tuning Kernel Parameters on Sun Solaris

You must be running Solaris 7 (Sun OS 5.7) or Solaris 8 (Sun OS 5.8) to install Service Reporting version 1.2.00. Maximum tablespace size is 16 GB for Oracle 8.1.5 and Oracle 8.1.7.

There are a number of kernel parameters that must be a minimum size in order for the DataStore to install and run properly on Sun Solaris. Prior to installing DataStore, you need to validate the kernel parameters.

Note -

For retrievers, you need only the Sun Solaris kernel tuning parameter kobj_map_space_len for Sun Solaris version 2.6.

- Step 1 Issue the sysdef command to get a listing of the tunable kernel parameters. The important information is usually at the end of the listing under IPC Messages, IPC Semaphores, and IPC Shared Memory.
- Step 2 Compare the values returned when you run the sysdef command with the following table of similar information:

```
* IPC Messages

65535 max message size (MSGMAX)

65535 max bytes on queue (MSGMNB)

256 message queue identifiers (MSGMNI)

512 system message headers (MSGTQL)

** IPC Semaphores*

1024 semaphore identifiers (SEMMNI)

2048 semaphores in system (SEMMNS)

2048 undo structures in system (SEMMNU)
```

```
max semaphores per id (SEMMSL)
   100
       max operations per semop call (SEMOPM)
   100
    30
       max undo entries per process (SEMUME)
       semaphore maximum value (SEMVMX)
 32767
 16384
       adjust on exit max value (SEMAEM)
* IPC Shared Memory
268435456
               max shared memory segment size
(SHMMAX)
   100 min shared memory segment size (SHMMIN)
   300
        shared memory identifiers (SHMMNI)
   100
      max attached shm segments per process
(SHMSEG)
```

- Note -

The sample output comes from a machine that has already had its kernel tuned for the DataStore installation.

Step 3 Do one of the following:

- If the numbers returned in Step 1 are equal to or larger than in Step 2, you can begin the DataStore install. For example, if the value returned by the **sysdef** command for **msg map** (**MSGMAP**) is 258 or larger, you can begin the DataStore install.
- If the numbers returned in Step 1 are smaller than those in Step 2, you need to tune the kernel parameters. For example, if the value returned by the **sysdef** command for **msg map** (**MSGMAP**) is smaller than 258, you must do one of the following:

— Insert the following recommended values in the /etc/system file on the Solaris computer. If a particular line contains an entry already, replace it with the value BMC Software recommends. Typically, if you are using the Solaris defaults, there are no entries for these values.

```
forceload: sys/shmsys
forceload: sys/semsys
forceload: sys/msgsys
set kobj map space len=2097152
set shmsys:shminfo_shmmax=268435456
set shmsys:shminfo shmmin=100
set shmsys:shminfo shmseq=100
set semsys:seminfo_semmsl=100
set semsys:seminfo semmni=300
set semsys:seminfo semume=30
set semsys:seminfo_semopm=100
set msqsys:msqinfo msqmax = 65535
set msqsys:msqinfo msqmnb = 65535
set msgsys:msginfo_msgmap = 258
set msqsys:msqinfo msqmni = 256
set msqsys:msqinfo msqssz = 16
set msgsys:msginfo_msgtql = 512
```

```
set msgsys:msginfo_msgseg = 32767
set shmsys:shminfo_shmmni = 300
set semsys:seminfo_semmni = 1024
set semsys:seminfo_semmap = 1026
set semsys:seminfo_semmns = 2048
set semsys:seminfo_semmnu = 2048
```

- If you edit the /etc/system file, you must restart the Solaris computer to reset the kernel parameters to the new values.
 You do not have to rebuild your kernel. After the restart, you should install DataStore according to the installation instructions.
- Optionally, you can rerun sysdef to verify that the new parameters are set.

Sun Solaris Pre-installation Tasks and Requirements

The following sections detail the pre-installation tasks and pre-requisites for installing Service Reporting in a Sun Solaris environment:

- Apply Sun Solaris patches (see "Applying Sun Solaris Patches to Run Service Reporting Aggregators" on page 4-12)
- Verify hardware and software levels (see "Verify Hardware and Software Requirements" on page 4-14)
- Evaluate installation location recommendations (see "Recommendations for Sun Solaris Installation Locations" on page 4-16)

Applying Sun Solaris Patches to Run Service Reporting Aggregators

Note	
For the latest information on which Solaris version numbers require which patches, go to the Sun Microsystems Web site at	
http://www.sun.com/developers/tools/solaris.	

You must install the appropriate Solaris patch to run the Aggregator. The patches are *NOT* required for Solaris Retrievers or the DataStore. The following table lists the required patch IDs by the Solaris version number and gives a brief description of the patch and any special circumstances associated with them.

Note
Note
While it is possible to install the Aggregator on Solaris 2.5 under
PATROL 3.2, the Aggregator is not supported on Solaris 2.5. It is
supported on Solaris 2.6, 7, and 8.

Table 4-3 Solaris Patch IDs Required to Run Service Reporting Aggregators

Solaris Version	Patch ID	Description
	105490-07 required	Linker Patch
	105568-16 required	Libthread Patch. Apply this patch last.
	105210-27 required	LibC Patch
	106040-13 required	X Input & Output Method Patch
2.6	105633-36 required	OpenWindows 3.6: Xsun Patch. This patch is required in Asian locales.
	106409-01 required	Fixes the Chinese TrueType fonts. This patch is required to display traditional Chinese characters in Swing applications.
	108091-03 required	SunOS 5.6: ssJDK1.2.1_03 fails with fatal error in ISO8859-01 Locales. This patch (108091-03 or newer) is required for any locale which uses ISO8859-1 or ISO8859-15 character encoding.
	105181-19 recommended	Kernel Update (socket close/hang).
	105669-10 recommended	CDE 1.2: libDTSvc Patch (dtmail).
	105284-31 recommended	Motif 1.2.7: Runtime library patch.
	106980-10 required	Libthread Patch. Apply this patch last.
	107636-03 required	X Input & Output Method Patch.
7	107081-11 required	Motif 1.2.7 and 2.1.1: Runtime library patch for Solaris 7
	108376-03 required	OpenWindows 3.6.1 Xsun Patch. This patch is required in Asian locales.
8	Not Applicable	No patches are required or recommended.

Step 1 Enter the following command:

ftp sunsolve1.sun.com

Step 2 Log on as anonymous/email.

Step 3 Change directory (cd) to:

pub/patches

- **Step 4** Get the appropriate file based on patch numbers. See "Applying Sun Solaris Patches to Run Service Reporting Aggregators" on page 4-12.
- **Step 5** Expand and untar the file to create a patch directory, for example, "105490-07."

Step 6 Run as root:

/usr/sbin/patchadd

giving it the patch directory. For example,

/usr/sbin/patchadd 105490-07

The command **patchadd** might indicate that you need to install other patches first or in single-user mode.

Verify Hardware and Software Requirements

Use the following tables to verify that you have the correct hardware and software levels to optimize the performance of Service Reporting.

Hardware Requirements

The following tables outline the various hardware requirements for the different components of Service Reporting. Table 4-4 shows the minimum and recommended hardware requirements for running DataStore.

Table 4-5 outlines the hardware requirements for running the Report Server on a different computer than the computer running DataStore. If you are running them on the same machine, take that into account when calculating your system hardware requirements.

Table 4-6 outlines the hardware requirements for running all Service Reporting components on one computer.

Table 4-4 DataStore Hardware Requirements

Component	Minimum	Recommended	
CPU	350 MHz	500 MHz	
Memory	512 MB RAM	1024 MB RAM	
Storage	10 GB Disks	20 GB Disks	

Table 4-5 Reporting Hardware Requirements

Component	Minimum	Recommended	
CPU	350 MHz	500 MHz	
Memory	1024 MB RAM	2048 MB RAM	
Storage	4 GB Disks	8 GB Disks	

Table 4-6 Hardware Requirements for Running All Service Reporting Components on One Computer

Component	Minimum	Recommended	
CPU	400 MHZ	Two 500 MHz	
Memory	1024 MB RAM	2048 MB RAM	
Storage	20 GB Disks	40 GB Disks	

The data aggregator must be running on a computer that has at least 128 MB RAM with a network connection to the DataStore.

Software Requirements

Table 4-7 outlines the software requirements for the different components of Service Reporting.

Table 4-7 Service Reporting Software Requirements

Component	Software	Version	
DataStore Microsoft Windows NT Server Sun Sparc Solaris		4.0, Service Pack 4 or later 2.7 or later	
Data Aggregator &	PATROL® Console	3.4.00 or later	
Retrievers	PATROL® Agent	3.4.00 or later	

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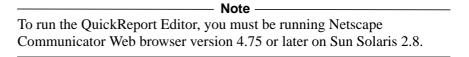
Table 4-7 Service Reporting Software Requirements

Component	Software	Version	
Reporting Components	Apache	1.3.9 or later	
	Netscape Web Server	3.51 and 3.6	
	Netscape Browser	4.5 or later (excluding 6.x) on NT 4.75 or later (excluding 6.x) on Sun Solaris	
	Sun JRE Plug-In	1.3 or later	

Browser Requirements

Service Reporting includes a QuickReport Editor that you can use to create report templates based on several generic report types.

You can use the QuickReport Editor with Netscape Communicator version 4.75 or later, as long as you install the Sun JRE Plug-in, version 1.3, available on the Website specified on the Service Reporting CD. For information on installing the JRE 1.3 Plug-in, see "Installing the JRE 1.3 Plugin to Run the QuickReport Editor on Sun Solaris" on page 6-15.



Recommendations for Sun Solaris Installation Locations

The following table recommends locations for installing the various Service Reporting components. The table makes the following assumptions:

- The PATROL Console is already installed on the computer identified in the table as the Sun Solaris Console.
- PATROL Agents are already installed on any or all of the computers (Console, Server, Managed).
- You will install retrievers and aggregators on the same computers with PATROL Agents.

 The Service Reporting Studio can only be installed on a Windows NT computer (only available when licensed for PATROL Service Manager).

Table 4-8 Option 1 - Installing Service Reporting Components in a Sun Solaris Environment

	On the Destination Computer				
To install the following Service Reporting Component	Use the following Installation Option	Sun Solaris Console	Sun Solaris Server	Managed Computers (Windows NT or Sun Solaris)	Client Computer (Windows NT or Sun Solaris)
DataStore Console					✓ (NT)
Aggregator Console KM	Install Data Collection	~	~		
Retrievers Console KM	Components	~	~		
Retrievers				~	
Data Aggregator			✓ or	V	
Report Server for Sun Solaris	Install		~		
QuickReports	Reporting Components		~		✓ (NT)
Solution Reports			~		
Web Agent	1		~		
DataStore Server DataStore Instance	Install Database Components		~		

Installing Service Reporting on Sun Solaris

This chapter describes the procedure for installing Service Reporting on a Sun Solaris computer, and contains the following topics:

Installation Overview	5-2
Installation	5-4
General Installation Recommendations	5-4
Installing DataStore Components on Solaris	5-4
Installing Reporting Components on Sun Solaris	5-12
Installation Verification	5-19
Uninstalling Service Reporting	5-20

Installation Overview

Since every production environment is unique, it is impossible to describe every possible configuration. You are the most knowledgeable person about where you want your consoles (DataStore and PATROL), Report Server, DataStore (server and instance), and Web client components installed to optimize productivity and response time. This chapter provides guidelines and recommendations for configuring your system in a Solaris environment.

Note —

When installing Service Reporting in a Sun Solaris environment you still need a Windows NT computer for the following components:

- ~ DataStore Console
- ~ Administrator Desktop
- ~ Reporting Studio

To successfully install DataStore and Reporting components on Solaris, you must:

- Have an Apache or Netscape Web Server installed and running
- Perform pre-installation tasks (Chapter 4, "Pre-Installation Information for Service Reporting on Sun Solaris")
- Install the Reporting components you want ("Installing Reporting Components on Solaris" on page 5-13)
- Extract and configure the Reporting components laid down during the installation process ("Extracting and Configuring Reporting Components on Solaris" on page 5-16)
- Tune kernel parameters ("Tuning Kernel Parameters on Sun Solaris" on page 4-8)
- Apply the appropriate system patches ("To Install the JRE Plugin When Running the QuickReport Editor on Sun Solaris" on page 6-15)

The chapter is organized in three sections —

- Installation
- Installation validation
- Uninstalling

You use the installation program to install Service Reporting to the Sun Solaris computer you are currently logged onto, or as a network installation on computers that are members of your local domain. The installation program lets you install Service Reporting components on one Sun Solaris computer or onto multiple computers at one time, including to your computer.

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If you are migrating from an earlier version of Service Reporting, refer to the current version of Service Reporting release notes for information.

Installation

Section 1 describes how to install Service Reporting components in a Sun Solaris environment.

General Installation Recommendations

- BMC Software recommends installing the PATROL® Console nearby but not on the computer where the DataStore and Report Server will be installed. This reduces resource consumption issues.
- To optimize performance and minimize the installation time required, BMC Software recommends using the CD to install everything, *except* retrievers, locally when possible.
- Use remote installation for retrievers and aggregators when installing to multiple hosts.
- In a high capacity production environment, BMC Software recommends installing the Report Server and the DataStore database on separate servers.



If you decide to upgrade to the next version of DataStore by installing the full DataStore Server and DataStore Instance rather than migrating, *you will lose all your existing data*.

You cannot install the DataStore Server or DataStore Instance over an existing installation. You must uninstall them before installing the new version.

Installing DataStore Components on Solaris

To successfully install DataStore components on Solaris, you must:

- Have an Apache or Netscape Web Server installed
- Install the DataStore components you want ("Installing the DataStore and DataStore Instance" on page 5-6 and "Installing the DataStore and Client" on page 5-9)
- Tune kernel parameters ("Tuning Kernel Parameters on Sun Solaris" on page 4-8)

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•	Apply the appropriate system patches ("Applying Sun Solaris Patches to Run Service Reporting Aggregators" on page 4-12)
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Installing the DataStore and DataStore Instance

In this section you install the DataStore and the DataStore Instance. See "Installing the DataStore and Client" on page 5-9 to install the DataStore Client and retrievers.

The combination of the DataStore Server and Instance requires a minimum of 20 GB for successful installation. In addition a DataStore Server running on Solaris requires 1 GB of memory.

- Note -

If it is impractical to run a browser on your Solaris computer, then you can run **setup.sh** -**serveronly**.

Note the URL that is displayed in the window. On another machine (NT, for example) enter that URL into your browser and complete the install from there. The pre-installation tasks do not apply to this type install.

To enhance performance, BMC Software recommends installing the DataStore database and instance on a separate machine from the DataStore Client.

- **Step 1** Insert the DataStore CD into the CD-ROM drive and enter **setup.sh** to run the installation utility and display the Welcome to the Installation Utility page.
- Step 2 On the Welcome to the Installation Utility page, click **Next** to display the Review License Agreement page.
- **Step 3** On the Review License Agreement page, select **Accept** to continue with the installation and click **Next** to display the Select Type of Installation page.

Step 4 On the Select Type of Installation page, click **Typical** or **Custom** and then **Next** to display the Specify Installation Directory page.

N	OTO	

The **Typical** install path offers a quick installation path with fewer panels, and uses default specifications. BMC Software strongly recommends using the **Custom** path for greater control over your installation configuration. Choose the **Typical** path if you are installing the product for the first time, or are new to the product. Choose the **Custom** installation path if you are an advanced user and want to customize the installation configuration. For the purposes of this example, the **Custom** installation path is described.

Step 5 On the Specify Installation Directory page, specify the location where you want to install Service Reporting in the BMC Products Installation Directory field. The default directory is /opt/bmc/. When finished, click Next to open the Select Products and Components to Install page.

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You must install data collection components (aggregators and retrievers) in the PATROL home directory, that is, the directory you installed PATROL into. BMC Software recommends installing reporting and database components into separate directories.

- Step 6 On the Select Products and Components to Install page, expand all trees and select Aggregator, DataStore Instance, DataStore Server and DataStore Client, Retrievers, Aggregator Console KM and Retrievers Console KM boxes. If you want to install retrievers remotely, BMC Software recommends a separate pass using Export. Click Next to display the DataStore Family Product Installation Directory page.
- Step 7 On the DataStore Family Product Installation Directory page, specify the PATROL Product Installation Directory (if other than the default) and the

PATROL Agent login name and password. Click **Next** to display the DS Server Properties page.

Note -

If you have installed PATROL 3.4.11 you must replace Patrol3 with PATROL3.4. If you have installed PATROL 3.5, you can use the default directory Patrol3.

- Step 8 On the DS Server Properties page, specify the Server's Local Bin Directory (if other than the default) and the Root login name and password. Click Next to display the Review Selections and Install page.
- **Step 9** On the Review Selections and Install page, review your selections and click **Install**.
- **Step 10** Watch the Installation Status page to verify that the DataStore installation installed successfully. Click **Next** to display the SUCCESS! page.
- Step 11 On the SUCCESS! page, click View Log File to review the installation log file. When you are done, click Finish.

Installing the DataStore and Client

BMC Software recommends installing the DataStore Client on the Service Reporting machine if the Service Reporting machine is different from the DataStore machine.

- Step 1 Insert the DataStore CD into the CD-ROM drive and enter setup.sh to run the installation utility to display the Welcome to the Installation Utility page.
- **Step 2** On the Welcome to the Installation Utility page, click **Next**. to display the Review License Agreement page.
- **Step 3** On the Review License Agreement page, select **Accept** to continue with the installation and click **Next** to display the Select Type of Installation page.
- Step 4 On the Select Type of Installation page, click Typical or Custom and then Next to display the Specify Installation Directory page.

Note -

The **Typical** install path offers a quick installation path with fewer panels, and uses default specifications. BMC Software strongly recommends using the **Custom** path for greater control over your installation configuration. Choose the **Typical** path if you are installing the product for the first time, or are new to the product. Choose the **Custom** installation path if you are an advanced user and want to customize the installation configuration. For the purposes of this example, the **Custom** installation path is described.

- Step 5 On the Specify Installation Directory page, specify the location where you want to install Service Reporting in the BMC Products Installation Directory field. The default directory is /opt/bmc/. When finished, click Next to open the Select Products and Components to Install page.
- **Step 6** On the Select Products and Components to Install page, expand all trees and select DataStore Client and Retrievers boxes. If you want to install retrievers remotely, BMC Software recommends a separate pass using

- Export. Click **Next** to display the DataStore Family Product Installation Directory page.
- Step 7 On the DataStore Family Product Installation Directory page, specify the PATROL Product Installation Directory (if other than the default) and the PATROL Agent login name and password. Click Next to display the DS Server Properties page.
- **Step 8** On the DS Server Properties page, specify the Server's Local Bin Directory (if other than the default) and the Root login name and password. Click **Next** to display the Review Selections and Install page.
- **Step 9** On the Review Selections and Install page, review your selections and click **Install**.
- Step 10 Watch the Installation Status page to verify that the DataStore installation installed successfully. Click Next to display the SUCCESS! page.
- Step 11 On the SUCCESS! page, click View Log File to review the installation log file. When you are done, click Finish.

Starting and Stopping DataStore on Unix

When DataStore is installed on a Unix computer you must stop it before you shutdown or restart your system. Once the system is up again, you must restart DataStore.



When DataStore is installed on a Unix computer, it is critical to make database backups a routine part of system administration. If the computer shuts down in an abnormal fashion—a power outage for instance—while DataStore is running, the DataStore database will be corrupted. Your only recourse is to restore the last backup to rebuild the database. For more information, refer to the *DataStore Administrator Guide*.

BMC Software recommends including the DataStore shutdown procedure as part of the Solaris computer's **rc stop scripts**. Including it in the shutdown script offers you an additional degree of reliability.

You can include the DataStore start up procedure as part of the Solaris computer's **rc start scripts**. Including it in the start script offers you a degree of reliability.

- **Step 1** Log on to the machine using your valid user ID.
- Step 2 Change directory (cd), if necessary, to a directory where you have write permissions because a temporary file is written there.
- Step 3 Make sure the ORACLE_HOME environment variable is set to the ora815 directory and that the ORACLE_SID environment variable is set to BMCEDS.
- Step 4 Use the aggcli command from the PATROL Console in \$PATROL_HOME/sr/bin to stop any aggregator connected to DataStore. The command is:

\$PATROL_HOME/sr/bin/aggcli -p 4568 -a <aggregator_node> -c aggexit

Step 5 Run **\$ORACLE_HOME/bin/oraadm immediate**.

Step 6 Shut down the machine.

Use the following procedure to start or restart the DataStore Server:

- **Step 1** Log on to the machine using your valid user ID.
- Step 2 Change directory (cd), if necessary, to a directory where you have write permissions because a temporary file is written there.
- Step 3 Make sure the ORACLE_HOME environment variable is set to the ora815 directory and that the ORACLE_SID environment variable is set to BMCEDS.
- Step 4 Run \$ORACLE_HOME/bin/oraadm start.

Installing Reporting Components on Sun Solaris

To successfully install Reporting components on Solaris, you must have an Apache or Netscape Web Server installed. The following sections describe how to install Reporting components.

Installing Reporting Components on Solaris

Use the following procedure to install Reporting components on your Solaris version 7 or 8 computer.



If it is impractical to run a browser on your Solaris computer, then you can run **setup.sh** -**serveronly**.

Note the URL that is displayed in the window. On another machine (NT, for example) enter that URL into your browser and complete the install from there. The pre-installation tasks do not apply to this type of install.

- **Step 1** Log on as the non-root user who will own the installation.
- Step 2 Insert the Service Reporting CD into the CD-ROM drive, cd to the top level directory of the CD-ROM, and enter the following command to run the installation utility and display the Welcome to the Installation Utility page:

setup.sh

- Step 3 On the Welcome to the Installation Utility page, click Next to display the Review License Agreement page.
- **Step 4** On the Review License Agreement page, click **Accept** to continue with the installation and click **Next** to display the Select Type of Installation page.

Step 5 On the Select Type of Installation page, click **Typical** or **Custom** and then **Next** to display the Specify Installation Directory page.

Note —

The **Typical** install path offers a quick installation path with fewer panels, and uses default specifications. BMC Software strongly recommends using the **Custom** path for greater control over your installation configuration. Choose the **Typical** path if you are installing the product for the first time, or are new to the product. Choose the **Custom** installation path if you are an advanced user and want to customize the installation configuration. For the purposes of this example, the **Custom** installation path is described.

Step 6 On the Specify Installation Directory page, specify the base directory under which you anticipate installing various BMC products, including Service Reporting, in the BMC Products Installation Directory field. The default directory is /opt/bmc. When finished, click Next to open the Select Products and Components to Install page.

Note —

You must have write permissions for this directory.

Step 7 On the Select Products and Components to Install page, expand all trees and select all boxes.

To speed installation, install only the Solution Reports for the Knowledge Modules (KMs) for which your site is licensed to collect data.

Note -

The QuickReport Editor is not an installation option. It is automatically installed when you install other Reporting components.

- **Step 8** Click **Next** to display the Specify Logon page.
- **Step 9** On the Service Reporting Installation Directory page specify the name of the directory created in the BMC Products Installation base directory to contain the Service Reporting installation (if other than the default) and the PATROL Agent Login Name and Password (provide the login id and

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- password of the installer). Click **Next** to display the SR Web Agent Properties page.
- Step 10 On the SR Web Agent Properties page, specify the Root Login Name and the Password. Click Next to display the Review Selections and Install page.
- **Step 11** On the Review Selections and Install page, review your selections and click **Install**. If there is insufficient disk space, you are alerted here.
- Step 12 Watch the Installation Status page to verify that the Service Reporting installation process completes successfully. When the installation is complete, click Next.
- Step 13 On the SUCCESS page, click View Log File to review the installation log file. When you are done, click Finish. The Reporting components are now installed on your system.

Extracting and Configuring Reporting Components on Solaris

During the installation process, files are laid down to install the:

- Java RunTime Environment (JRE)
- Publisher and Zone Index Servers
- Reporting Portal Application

Note -

Note the path to your Service Reporting Install Directory. The following procedures refer to the path as *<Service Reporting installation directory>*.

The following sections describe how to extract and configure the various Reporting components.

Locating and Installing the JRE 1.3.1

- **Step 1** Change directory to *Service Reporting installation directory*>/JRE/temp_jre.
- **Step 2** Run check_jres.sh to check your machine for the presence of JRE 1.3.1.
- **Step 3** Do one of the following:
 - If JRE 1.3.1 is present:
 - Run **export JAVA_HOME** = < *path to JRE installation>*.
 - Go to "Setting Environment Variables" on page 5-17.
 - If JRE is not present, do the following to install JRE 1.3.1:
 - Change directory to *Service Reporting installation directory*>/JRE.
 - Run ./temp_jre/j2re-1_3_1-solsparc.sh to extract the JRE files in the current directory.

Setting Environment Variables

Step 1	Change to the <service directory="" installation="" reporting="">/JRE/temp_jre</service>
	directory.

- **Step 2** Run ./configure_jre.sh to initialize global environment files.
- **Step 3** If you have insufficient rights, the script terminates with a relevant message. If this occurs, superuser to root and re-run the script.

Once the JRE installs, you can remove the **temp_jre** directory.

If you want the Reporting Portal environment variables fully configured when you login, add the following line to your .profile or .kshrc file.

Mata

 $.\ /var/opt/bmc/sr/rp_envt.default$

	Note —
There is a space	between the period (.) and the word /var.

Installing the Publisher and Zone Index Servers

- **Step 1** Change to the *Service Reporting installation directory*>/publisher/bin directory.
- Step 2 Run config_pubsvr.sh.
- **Step 3** Superuser to Root (su root).

Step 4 Run ./create-rc-links.sh -s pubsvr to configure the rc scripts for automatic startup and shutdown of the Publisher Server.

Note -

If, when you run **create-rc-links.sh** -s <*servername*>, the link already exists, you will get an error message. This occurs only during subsequent installations. To update the links, run **rm-rc-links.sh** -s <*servername*>, then re-run **create-rc-links.sh** -s <*servername*>.

- Step 5 Run ./create-rc-links.sh -s zisvr to configure the rc scripts for automatic startup and shutdown of the Zone Index Server.
- **Step 6** Enter **Exit** so that you are no longer user root.
- Step 7 Start up the servers by running ./pubserver.sh start and ./ziserver.sh start

Installing the Reporting Portal

- **Step 1** Change directory to < Service Reporting installation directory > /temp_rpi.
- **Step 2** Run the installation script **install_rportal.sh**.
- **Step 3** Superuser to Root (su root).
- **Step 4** If the following message appeared while running install_rportal.sh, you did not have adequate permissions to update the Apache Web Server configuration.

\$PUBLISHER_HOME/config/include_line must be
appended to \$WEBSERVER_CONF

To correct this, run ./setup_apacheconf.sh or ./setup_iplanetconf.sh.

Step 5 Run **create-rc-links.sh -s tomcat** to configure the rc scripts for automatic startup and shutdown of Tomcat.

- **Step 6** Change to your Apache or Netscape Web Server directory and restart the web server.
- **Step 7** Enter **Exit** so that you are no longer user root.
- **Step 8** Change directory to the *Service Reporting installation directory*>/AcServer/bin.
- Step 9 Run ./shutdown_srvr.sh -y.
- Step 10 When that finishes, run ./start_srvr.sh.
- **Step 11** When that finishes, test the Reporting Portal install. Go to your browser and enter the URL http://hostname/rportal/index.html.

Installation Verification

- In order to successfully install the DataStore onto the Sun Solaris operating environment you must complete a series of pre- and post-installation steps. For more information on these required pre- and post-installation steps, see *Oracle8i Installation Guide Release 2* (8.1.7) for Sun SPARC Solaris.
- To see if DataStore is installed correctly, execute the Unix **ps -ef |grep BMCEDS** command to locate the following processes.
 - Database
 - ora pmon BMCEDS
 - ora_dbw0_BMCEDS
 - ora_ckpt_BMCEDS
 - ora lgwr BMCEDS
 - ora smon BMCEDS
 - LISTENER
 - tnslsnr listener -inherit
 - Data collection
 - sr_eventret
 - sr_historyret
 - sr_agg

- Report Server
 - admserv4
 - pobserv4
 - reqserv4
- Web Agent (ps -ef |grep AcServer/bin*)
 - AcServer/bin/admserv4
 - AcServer/bin/pobserv4
 - AcServer/bin/reqserv4
- Virtual X Server (ps -ef |grep Xvfb)
 - ./Xvtb
- Verify the database connection. See the *DataStore Administrator Guide* for instructions on how to validate the database connection.
- View the Service Reporting Website.

Uninstalling Service Reporting

To remove Service Reporting components from your computer you must remove the data collection components seperately from reporting components on Unix.

Uninstalling Reporting Components on Sun Solaris

Step 1	Set environment variables by running:			
	./var/opt/bmc/sr/rp_envt.default			
		Note		
	There	is a space between the period and the first back slash.		
Step 2	Add th	ne current directory to the path.		
	export	PATH=\$PATH:.		
Step 3	Uninst	all the Reporting Portal and Tomcat server.		
	3.A	Change directories to <i>Service Reporting home</i> >.		
	3.B	Switch user to root.		
		su root		
	3.C	Remove the link for the Tomcat server by running:		
		\$TOMCAT_HOME/bin/rm-rc-links.sh -s tomcat		
	3.D	Exit from user root.		
	3.E	Remove the Reporting Portal and Tomcat server by running:		
		uninstall_rp_tc.sh script		
Step 4	Uninst	all the Publisher and Zone Index servers.		
	4.A	Change directories to <i>Service Reporting home></i> .		
	4.B	Switch users to root.		

- 4.C su root
- 4.D Remove the link for the Publisher server by running:./publisher/bin/rm-rc-links.sh -s pubsvr
- **4.E** Remove the link for the Zone Index server by running:

 ./publisher/bin/rm-rc-links.sh -s zisvr
- **4.F** Exit from user root.
- **4.G** Remove the Publisher and Zone Index servers by running:

./uninstallsrvrs.sh

Uninstalling DataStore on Sun Solaris

You run the BMC Software Uninstall program to remove the DataStore component of Service Reporting.

- **Step 1** Change directories to *<installationdirectory>/Uninstall.*
- Step 2 Run uninstall.sh.
- Step 3 On the Welcome to Installation Utility Uninstall Mode page, click Next to display the Select Type of Uninstall page.
- Step 4 Select Selected Products, and click Next to display the Specify Installation Directory page.
- **Step 5** Verify the directory path, and click **Next** to display the Select Products and Components to Uninstall page.
- **Step 6** Select DataStore, and click **Next** to display the Review Selections and Uninstall page.
- **Step 7** Click Uninstall to display the Uninstall Status page.
- Step 8 Watch the Uninstall Status page to verify that the process is complete. When it has completed, click Next.
- Step 9 On the SUCCESS! page, click View Log File to review the installation log file. When you are done, click Finish.
- **Step 10** Change to your Apache or Netscape Web Server directory and restart the web server.

Configuring Service Reporting

This chapter describes how to configure Service Reporting and includes the following topics:

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Configuring Reporting Components6-6	5
Maintaining Security6-6	5
Adding Users to the Service Reporting Report Server6-7	7
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Synchronizing the Report Server with the DataStore for Data	
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Solaris	15
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Overview of Configuring Service Reporting

Configuration in Service Reporting is separated between the configuration of data collection components, which includes data aggregators and retrievers, and the configuration of reporting components, which includes connecting the Report Server to the DataStore.

In the configuration of data collection components you connect the components together to ensure that collected data is passed from the event or history retriever to the data aggregator and from there, to the DataStore. For more information on using the data collection components in your environment, see the *DataStore Administrator Guide*.

For reporting components, the configuration primarily concentrates on security issues dealing with account name and password information and connecting the Report Server to the DataStore. For more information on reporting components, see the *Reporting User Guide* and Actuate documentation which can be found on the PATROL Performance Documentation CD.

There is a final section which describes how create start-up scripts that run both DataStore and Reporting components.

Configuring Data Collection Components

In Service Reporting data collection components must be configured to connect retrievers to the data aggregator and the data aggregator to the DataStore. For configuration, the DataStore Knowledge Module is used with a PATROL Operator or Developer Console. The DataStore KM allows you to configure, start, stop, and monitor data aggregators and retrievers in your environment locally or remotely.

Local configuration only configures the data aggregator or retriever located on the computer you are currently logged on. Remote configuration allows you to configure multiple data aggregators or retrievers contained within your environment, including the local computer. Before you can configure remote data aggregators or retrievers you must first add their host information to the remote host list.

Once you have configured the data aggregators and retrievers in your environment, the settings are sent to the PATROL Agent hosting the retrievers or data aggregator.

Note -

Figure 6-1 and Table 6-1 list the minimum tasks required to quickly begin collecting data. For additional information on configuring data collection components, see the *DataStore Administrator Guide*.

Figure 6-1 Steps to Set Up Data Collection

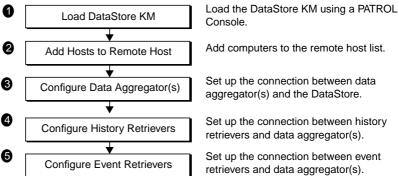


Table 6-1 Data Collection Configuration Steps (Part 1 of 2)

Step	Commands to use in the PATROL Console	Notes
Load the DataStore KM	Start a PATROL Developer Console. Choose File => Load KM. Locate SERVICE_RPT.kml and click Open.	The SR_DATASTORE application class appears in the bottom portion of the PATROL Console.
Add hosts to the remote host list	Right-click the SR_DATASTORE application class and choose KM Commands => Remote Administration => Add Hosts. Enter the Host Name, PATROL Agent port number, user name, and password for each agent where a data aggregator or retriever is installed and click Add. Click Done when you have added all the hosts you want.	The remote host list is used to configure remote data aggregators and retrievers.
Configure data aggregators	 To configure the local data aggregator Expand the SR_DATASTORE application class. Right-click the Aggregator application instance and choose KM Commands => Administration => Configure Aggregator. Enter the name of the computer hosting the Service Reporting DataStore, using eda_user as the database username/eda as the database password, and then click Save. To configure remote data aggregators Right-click the SR_DATASTORE application class and choose KM Commands => Remote Administration => Config. Remote Aggregator. Select the hosts of the data aggregators you want to configure and click OK. Select three as the logging level of detail. It helps when it comes to debugging. Enter the name of the computer hosting the Service Reporting DataStore, use eda as the database password, and then click Send. 	Once you click Save or Send , the configuration settings for the data aggregator(s) are sent to the PATROL Agent(s). Warning : Do <i>not</i> change the database port, database instance, database username, or aggregator port. The other fields can be changed; however, the recommended settings are selected. See the online Help for details.

Table 6-1 Data Collection Configuration Steps (Part 2 of 2)

Step	Commands to use in the PATROL Console	Notes
Configure history retrievers	 To configure the local history retriever Click the SR_DATASTORE application class. Right-click the HistoryRet_<port> application instance and choose KM Commands => Administration => Configure History Retriever.</port> Select three as the level of detail. It helps when it comes to debugging. Enter the name of the computer hosting the data aggregator to which you want to connect the retriever and click Save. 	Once you click Save or Send , the configuration settings for the history retriever are sent to the PATROL Agent.
	 To configure remote history retrievers Right-click the SR_DATASTORE application class and choose KM Commands => Remote Administration => Config. Remote History Retrvr. Select the hosts of the history retrievers you want to configure and click OK. Select three as the level of detail. It helps when it comes to debugging. Enter the name of the computer hosting the data aggregator to which you want to connect the retrievers and click Send. 	
Configure event retrievers	 To configure the local event retriever Click the SR_DATASTORE application class. Right-click the EventRet_<port> application instance and choose KM Commands => Administration => Configure Event Retriever.</port> Enter the name of the computer hosting the data aggregator to which you want to connect the retriever, and then enter the PATROL user name and password of the agent on the retriever computer, and click Save. To configure remote event retrievers Right-click the SR_DATASTORE application class 	Once you click Save or Send , the configuration settings for the event retriever are sent to the PATROL Agent.
	 and choose KM Commands => Remote Administration => Config. Remote Event Retrvr. Select the hosts of the event retrievers you want to configure and click OK. Enter the name of the computer hosting the data aggregator to which you want to connect the retrievers, and click Send. 	

Configuring Reporting Components

The configuration of the reporting components for Service Reporting are limited to assigning new account and password information and connecting the Report Server to the DataStore.

Maintaining Security

As reporting components are installed, they are installed using default account and password information. Table 6-2 lists default account name and password settings that you will want to change to ensure that you environment is secure.

Table 6-2 User Account and Password Settings

Account / Password	Description	Additional Information
Report Server User Account and Password	During installation, the report server uses the account of the user who installed the product. However, you may want to specify another account to ensure that system facilities, such as e-mail notification, and ODBC connections are aware of the report server account.	For more information on setting up a new Report Server account, see the Actuate Report Server Guide.
Report Encyclopedia User Account and Password	In the Report Encyclopedia there are user accounts already defined. The Administrator account for the Report Encyclopedia does not have a password setting. To improve the security of the data in the Encyclopedia you may want to add a password setting not only for the Administrator account but also for other user accounts also. The PATROL account uses the default username "patrol" and password "patrol" and has administrator privileges.	For more information on setting up user accounts and passwords for the Report Encyclopedia, see the Actuate document Administering the Report Encyclopedia.

Adding Users to the Service Reporting Report Server

Three additional users have been added to the Service Reporting Report Server. The new users provide specific access to the Report Server during installation, Report Server operations, and QuickReport Editor processing.

Upon installation, the following users are added to the Report Server:

Table 6-3 User Names and Passwords for the Report Server

User Name/Password	Roles	Function
patrol/patrol	Administrator	Used during the installation process. Do not change the user name or password.
qre_user/qre	Administrator	Used by the QuickReport Editor to process report templates. Do not change this password.
sr_user/sruser	Administrator	Used by the Report Server administrative user.
sr_viewer/[no password]	Site User	Used by SiteUser to view reports. Has limited rights.

During normal operations, typically the only active users are sr_user for administrative purposes, and sr_viewer for report viewing.

The Site User is a new role that lets you add additional users. You create new users and add them to the SiteUser role.

Note –

If you want to schedule new reports with new users, you do not need to unschedule existing reports. However, if you change the Patrol/Patrol username and password, existing Solution Reports will not run. You must unschedule the existing Solution Reports and reschedule them.

Creating and Assigning New Users

- **Step 1** Log on to the Report Server using **User name**: sr_user and **Password** sruser.
- Step 2 Right-click Users and click New User.
- **Step 3** Enter the User name and New password.
- **Step 4** Confirm password.
- Step 5 Click the Roles tab.
- **Step 6** Click twice in the box next to the SiteUser role.
- Step 7 Click OK.
- **Step 8** Repeat for each user.

Connecting the Report Server to the DataStore

If you install the DataStore and the Report Server onto different machines, you must run the Net8 Assistant utility provided by Oracle on the computer hosting the Report Server to connect to the DataStore.

Connecting the Report Server to the DataStore on Windows NT and Sun Solaris

Summary:

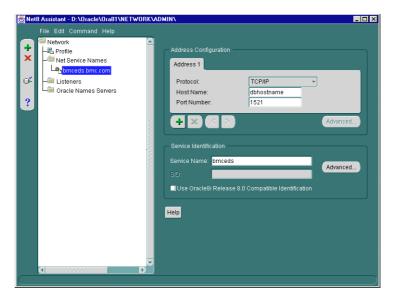
This task describes how to connect the Report Server to the DataStore located on another computer.

- **Step 1** Do one of the following to open the Net8 Assistant dialog box.
 - 1.A On Windows NT.

 Start => Programs => BMC PATROL => Service
 Reporting => Net8 Assistant.
 - **1.B** On Sun Solaris.
 - Set the following environment variables
 ORACLE_SID=BMCEDS
 ORACLE_HOME=Where Oracle is installed
 TNS ADMIN =/\$ORACLE HOME/network
 - Run /ora815/bin/netasst on Solaris to get into the Oracle Client.

The Net8 Assistant dialog box appears.

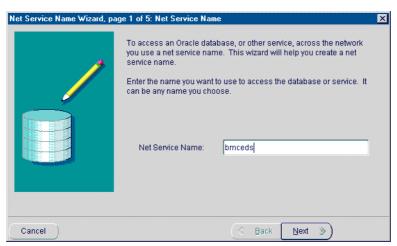
Figure 6-2 Net8 Assistant



Step 2 Highlight Net Service Names and click + to add the service name.

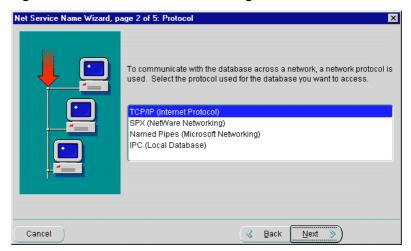
The Net Server Name Wizard appears.

Figure 6-3 Net Server Name Wizard Page 1



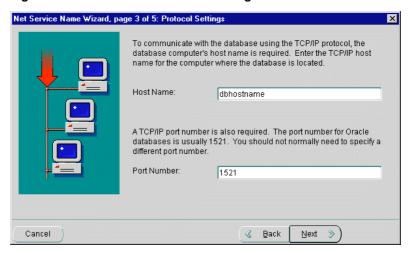
- **Step 3** In the Net Service Name text box, enter the service name and click **Next**.
- **Step 4** In the list box, select the TCP/IP (Internet Protocol) selection and click **Next**.

Figure 6-4 Net Service Name Wizard Page 2



Step 5 Enter the host name and port number for the computer hosting the DataStore and click Next.

Figure 6-5 Net Service Name Wizard Page 3



Step 6 Select the Oracle8i release 8.1 option box and enter the Service name, the actual name of the database, the default is bmceds, and click Next.

Figure 6-6 Net Service Name Wizard Page 4



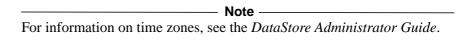
Step 7 In the last page of the Net Service Name Wizard, click Finish or click Test to verify that you can log into the database.

The Net8 Assistant dialog box appears.

Step 8 Highlight the service name you just created and choose File => Save Network Configuration to save the database settings.

Synchronizing the Report Server with the DataStore for Data Summarization

In the DataStore, data summarization creates summarized data using the time zone specified in the Time Zones dialog box. However you must make sure that the Report Server is correctly synchronized with the DataStore to ensure that reports display the correct time zone information from the data summarized.



To make sure that the Report Server is synchronized with the DataStore, BMC Software installs several scripts that you can run to determine what settings the DataStore and Report Server are using for data summarization. Table 6-4 lists the available scripts and provides a brief description of their purpose. The scripts are located in %PATROL_SR_ROOT%/bmcreports/install. For more information on using the data summarization scripts, see the *DataStore Administrator Guide*.

Table 6-4 Report Server Data Summarization Scripts (Part 1 of 2)

Script	Purpose
tz_util testc	Verify that you are able to connect to the DataStore from the Report Server.
tz_util qdben	View the time zone currently being used for data summarization in the DataStore.

Table 6-4 Report Server Data Summarization Scripts (Part 2 of 2)

Script	Purpose
tz_util sdcfg	Configure the Report Server to create reports using the default time zone in the DataStore.
tz_util sscfg	Configure the Report Server to create reports using a DataStore time zone id.
tz_util qdbal	View a list of all time zones supported by the DataStore.
tz_util soffs	Record the GMT offset of the Report Server.
tz_util qcfg	Display the current Report Server settings for local time zone offset and report time zone.

Changing the Default Notification Setting for the Completed Requests Folder

You receive notification from the Report Server when a report request is completed. The default setting for the **Completed Requests Folder** is to keep the notifications in the Completed Report Requests folder. You can reset the notification so that it deletes the notifications, freeing up work space and requiring less intervention on your part.

- Step 1 In the Administrator Desktop, click the Users icon in the left pane. The right pane displays a list of users that are defined for the Report Server. The default list is: administrator, patrol, qre_user, sr_user, and sr_viewer.
- **Step 2** Right-click **Administrator** and select **Properties**.
- **Step 3** Select the **Notification** tab. There are two kinds of completed requests:
 - Requests that Succeed
 - · Requests that Fail

The default setting is: **Do not automatically delete the notification**.

- **Step 4** Change to Automatically delete the notification after.
- **Step 5** Select five days for **Succeed** and 14 days for **Fail**.

You can repeat this process for other users who generate reports.

Installing the JRE 1.3 Plugin to Run the QuickReport Editor on Sun Solaris

If you are using Netscape Web Browser 4.76 to run the QuickReport Editor on a Sun Solaris version 8 computer (as opposed to Windows NT), the first time you logon to the QuickReport Editor, you need to install the JRE 1.3 Plugin.

To Install the JRE Plugin When Running the QuickReport Editor on Sun Solaris

There are two ways to log in to the QuickReport Editor and install the Java RunTime Environment (JRE) Plugin.

Step 1 If you are running the QuickReport Editor from a different machine than where it is installed, launch your Web Browser and enter the following url:

http://server-name/bmcreports/qre.html

or

http://server-name/acweb/server-name and double-click the QuickReport Editor icon to display the QuickReport Editor Welcome page.

- Step 2 On the Report Encyclopedia main page, click User: anonymous, Log On to open the Enter Network Password dialog box.
 - **2.A** Enter the user name and password provided by your administrator. The default is:

User Name: patrol Password: patrol

- **2.B** Click **OK** to display the **QuickReport Editor** icon and name in the tool bar.
- **Step 3** Double-click the **QuickReport Editor** icon to display the QuickReport Editor Welcome page.

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- **Step 4** Download the JRE 1.3 plugin to a local directory. As you are entering the information, note the file name, directory, and location.
- **Step 5** Navigate to the directory where the download was installed and double-click the Java Plug-in Software executable to install it.
- **Step 6** Run the JRE download to extract the files.
- **Step 7** Run the following script to set the Netscape Browser plugin **javaplugin.so** path.

```
NPX_PLUGIN_PATH=`pwd`/jre/1.3.0_02/plugin/sparc/ns4;
export NPX_PLUGIN_PATH
```

- **Step 8** Stop and restart the Netscape Browser.
- **Step 9** Add NPX_PLUGIN_PATH to the user's .profile shell.

```
NPX_PLUGIN_PATH=<plugin path>;
export NPX_PLUGIN_PATH
```

Display Issues

- When you display reports online, the report legends are not displayed. There is currently no work around for this problem.
- Use the small fonts on your PC's display setting. Using a large font setting might prevent some words from being displayed on reports or on various tabs within the interface.
- Many Service Reporting reports let you query the database for data on the top *n* components. However, if data is available for only one component, the report displays the correct results, but the report title reflects your original query—the top *n* you specified. The report displays the data for the one component followed by blank lines for the number of components you specified.
- When you are displaying a summary or solution graph with only one bar chart, it is oversized and might look awkward.

- Note -

BMC Software recommends a 1024 x 768 with 16-bit color (65,536 colors) monitor resolution for optimum report viewing on IE 5.0 or later. However, when using Netscape 4.5 or later, use the next higher color setting (16777216 colors).

Using the Log File Cleanup Tool

Service Reporting installs a default storage zones for generic and solution reports in a folder called **Default**. It also sets up a utility storage zone for log cleanup and retriever status reports called **zz_SysUtils**. The Log File Cleanup Tool manages the two directories by deleting the daily, weekly, and monthly logs using predefined deletion criterion.

The Log File Cleanup Tools, data source files, are scheduled at installation time to run at the following times:

Table 6-5 Log File Cleanup Tool Schedule

Cleanup Tool	Schedule
Daily cleanup	3 A.M., everyday
Weekly cleanup	3 A.M., every Sunday
Monthly cleanup	3 A.M., first day of each month

You modify the Cleanup Tool schedules in the same way you modify Solution Report schedules.

If you define your own storage zones, you must change the existing Log File Cleanup Tool entries for specific storage zones or add new ones. The following sections describe the file location and organization information you need to customize the Log File Cleanup Tool.

Log File Cleanup csv File Location

The Log File Cleanup Tools are contained in data source (csv) files. There is a cleanup file associated with the daily, weekly, and monthly reports in the following directories.

- bmcreports\cfg\cleanup\filecleanup_daily.csv daily report cleanup
- bmcreports\cfg\cleanup\filecleanup_weekly.csv weekly report cleanup
- bmcreports\cfg\cleanup\filecleanup_monthly.csv daily report cleanup

Table 6-6 Log File Cleanup Tool Contents

Column Index	Column Name	Туре	Description	Example
1	TaskName	String	Describe the cleanup task. Should be surrounded by quotes.	"SR Temporary Directory"
2	Platform	String	Platform on which cleanup is running. Either 'Windows' or 'Unix'.	Windows
3	Command	String	Command filename. Should include the absolute existing path.	~/install/List All.bat
4	Output	String	Prefix for the temporary output file which contains list of log file names. The whole output file name will be <pre><pre><prefix>yyymmddhhnnss</prefix></pre>. The name should include the absolute path.</pre>	~\Default\doc uments\ListT mp
5	MarkFile	String	Prefix for the temporary mark file name. Whole name will be <pre><pre><pre><pre><pre><pre>prefix>yyymmddhhnnss</pre>. The name should include the absolute path.</pre></pre></pre></pre></pre>	~\Default\doc uments\Mark Tmp
6	UseTemp	String	A one-character discriminator which indicates whether or not to clean the log files in the bmcreports\Temp directory. "Y" for Yes, "N" for No.	У
7	BaseDir	String	Use as the base directory from which to start the search. Used only when UseTemp = n. If UseTemp = y, then leave it blank.	
8	Pattern	String	Pattern of file name to locate.	ERT*.log
9	Age	Integer	Age (in days) of the files to locate.	1
10	Command TimeOut	Integer	The length of time in second(s) to wait for the mark file to be generated. The default is 10 seconds.	20

Publisher Server and Zone Index Server Log File Cleanup

Both the Publisher Server and Zone Index Server publish log files that are useful troubleshooting tools. Publisher Server logs are located in **%PUBLISHER_HOME%\work\pubsvr\log**. Zone Index Server logs are located in **%PUBLISHER_HOME%\work\zisvr\log**.

These directories have automatic archival features that limit the size and number of the log files so it's not necessary to use the Log File Cleanup Tools. The default size limit of the log folder is 5 MB. When the limit is reached, the old log file is overwritten.

Understanding the Deletion Criterion

The Log File Cleanup Tool deletes logs from the Default and Temp storage folders based on the age of the data. The following table gives the log location, it's deletion criterion, and a brief description.

Table 6-7 Log File Cleanup Tool Contents

Landaadan	Deletion Criterion	Description
Log Location	(in days)	Description
~\Temp\ERT*.log	1	Delete yesterday's report log in the Temp directory.
~\Default\documents*.log	15	Delete the generic report logs that are older than 15 days and are in the Default storage folder.
~\Default\soln\daily*.log	8	Delete daily solution report logs that are older than eight days and are in the Default storage folder.
~\Default\soln\weekly*.log	32	Delete the weekly solution report logs that are older than 32 days and are in the Default storage folder.
~\Default\soln\monthly*.log	200	Delete the monthly solution reports logs that are older than 200 days and are in the Default storage folder.
~\zz_SysUtils\daily*.log	8	Delete daily cleanup and retriever status report logs that are older than eight days and are located in the zz_SysUtils storage folder.
~\zz_SysUtils\weekly*.log	32	Delete weekly cleanup logs that are older than 32 days and are located in the zz_SysUtils storage folder.
~\zz_SysUtils\monthly*.log	200	Delete logs of monthly cleanup reports that are older than 200 days and are located in the zz_SysUtils storage folder.
~\\Server\log.txt	0	Delete log.txt immediately.
~\\Server\log*.log	15	Delete the Actuate Report Server log that is generated before 15 days.

------ Note -----

Unix is case sensitive. You must delete mixed-case file names from the data source file and substitute lower case names.

Modifying the Log File Cleanup Tool

If you set up your own storage zone by modifying the Default storage zone folder, you must modify the corresponding record in csv files for the Log File Cleanup Tool to work.

You can only change the \Default folder. You cannot modify the \\zz SysUtils storage folder.

Table 6-8 Modifying the Log File Cleanup Report

Column Number	Recommended Modification
1	A string representing the task name. The string needs to appear in quotes.
2	Windows or Unix.
3	No modification.
4	Change /Default to <mystoragezone>.</mystoragezone>
5	Change /Default to <mystoragezone>.</mystoragezone>
6	No modification.
7	Change /Default to <mystoragezone>.</mystoragezone>
8	No modification.
9	No modification.
10	No modification.

- Example -

[&]quot;~\<myStorageZone>\soln\daily", Windows,

^{~\}install\Win32\ListAll.bat,

 $[\]sim \label{listSoD} \\ \sim \label{listSoD} \\ \text{documents} \\ \text{ListSoD}, \\$

^{~\&}lt;myStorageZone>\documents\MarkSoD, n,

 $[\]sim \sim soln \cdot sol$

Adding a New Storage Zone Entry

If you define new storage zones, you must add new records to the csv file to manage the new storage zones.

You can change only the \Default folder to \<myStorageZone>. You cannot modify /zz_SysUtils.

Table 6-9 Adding New Storage Zones to the Log File Cleanup Tool

Column Number	Recommended Modification
1	A string representing the task name. The string needs to appear in quotes.
2	Windows or Unix.
3	Copy the existing command column.
4	Specify the path and file prefix of the temporary output file such as <mystoragezone>\documents\output.</mystoragezone>
5	Specify the path and file prefix of the temporary MarkFile file such as <mystoragezone>\documents\Mark</mystoragezone> .
6	Should be a character <i>n</i> .
7	Specify the path of the log files such as <pre><mystoragezone>\soln\daily>.</mystoragezone></pre>
8	Specify a pattern for the log files, such as *.log.
9	Specify the deletion criterion as an integer. You can reference the existing deletion criterion.
10	Specify an integer to represent the time out in seconds. You can reference the existing time out criterion.

Example -

 $[\]verb|`-<newStorageZone>|soln| daily", Windows,$

^{~\}install\Win32\ListAll.bat,

^{~\&}lt;newStorageZone>\documents\ListSoD,

^{~\&}lt;newStorageZone>\documents\MarkSoD, n,

^{~\&}lt;newStorageZone>\soln\daily, *.log, 8, 10

Start-Up Scripts for Sun Solaris

Service Reporting is installed with start-up scripts to initiate activity on the Report Server and the Web agents. There is additional documentation inside each script.



For information on DataStore start-up and shutdown, see "Automate Database Startup and Shutdown (Optional)" on page 6-25.

Report Server Scripts

There are two Report Server start up scripts which are installed to:

<installdir>/AcServer/bin

- shutdown srvr.sh
- start srvr.sh

To automatically start the Report Server whenever the system is shutdown and rebooted, you must run **update_rclocal.sh** as superuser (the root id). The **update_rclocal.sh** installs the start up and shutdown scripts in the inet.d directory at reboot time.

Web Agent Scripts

There are two Web agent scripts which start and stop the Web agents.

- startreportcast.sh installed in *webserverhome*/actuate/bin
- stopreportcast.sh installed in *webserverhome*/actuate/bin

To find *webserverhome*, enter the following command:

```
ps -ef | grep http
```

You will get a response similar to:

/doc/webserver/netscape/etc

Go to /doc/webserver/netscape to look for actuate/bin. When you find actuate/bin, look for the reportcast start and stop scripts.

Sample Script

The following is a sample script which you can use as a model for your own site. The pound sign (#) represents a comment.

```
    Note –

All scripts must be tailored for your site.
#!/bin/sh
ORACLE_HOME=/opt/PATROL3-4/ora815
ORA OWNER=patrol
ORACLE_SID=BMCEDS
export ORACLE HOME ORA OWNER ORACLE SID
if [! -f $ORACLE_HOME/bin/oraadm]
echo "BMCEDS startup: cannot start"
exit
fi
case "$1" in
'start')
# Start the BMCEDS databases:
su - $ORA OWNER -c $ORACLE HOME/bin/oraadm start &
su - $ORA OWNER -c $ORACLE HOME/bin/Isnrctl start LISTENER
&
;;
'stop')
# Stop the BMCEDS database:
```

```
su - $ORA_OWNER -c $ORACLE_HOME/bin/oraadm immediate & ;; esac
```

you will have to create these entries in the appropriate directory:

```
# ln -s /etc/init.d/bmcora /etc/rc0.d/K10bmcora # ln -s /etc/init.d/bmcora /etc/rc2.d/S99bmcora
```

Automate Database Startup and Shutdown (Optional)

You can configure your system to automatically start Oracle databases when your system starts up and to shut down Oracle databases when your system shuts down. Automating database startup is optional, but automatic shutdown is recommended because it guards against improper shutdown of the database.

The oraadm start and oraadm immediate scripts are located in the \$ORACLE_HOME/bin directory and can be used to automate database startup and shutdown.

The oraadm start and oraadm immediate scripts reference the same entries in the oratab file, so the scripts must apply to the same set of databases. For example, you cannot have oraadm start automatically start up databases sid1, sid2, and sid3, and oraadm immediate shut down only databases sid1 and sid2. You can, however, specify that oraadm immediate shut down a set of databases while oraadm start is not used at all. To do this, include the oraadm immediate entry in the shutdown file but omit the oraadm start entry from the system startup files.



For a description of system startup and shutdown procedures, check the init command in your Sun SPARC Solaris documentation.

This process must be completed for every new database that you want to configure for automated startup and shutdown. Perform the following tasks to set up the orandm start and orandm immediate scripts so that they are called at system startup:

Step 1 Edit the /var/opt/oracle/oratab file.

Database entries in the oratab file appear in the following format:

```
ORACLE SID: ORACLE HOME: {Y|N}
```

where Y or N specifies whether you want the orandm start and orandm immediate scripts to start up and shut down the database. Find the entries for all the databases that you want to start up. They are identified by the sid in the first field. Change the last field for each to Y.

- Step 2 Create a file named dbora in the /etc/init.d directory (if it does not already exist).
- Step 3 Create entries similar to the following at the end of the **dbora** file (if they do not already exist). Be sure to give the full path of the **oraadm start** utility.

```
#!/bin/sh
# Set ORA_HOME to be equivalent to the ORACLE_HOME
# from which you wish to execute orandm start and
# orandm immediate
# set ORA_OWNER to the user id of the owner of the
# Oracle database in ORA_HOME
```

if[! -f \$ORA HOME/bin/oraadm start]

ORA_HOME=/u01/app/oracle/product/8.1.7

ORA OWNER=oracle

```
then
echo "Oracle startup: cannot start"
exit
fi
case "$1" in
'start')
# Start the Oracle databases:
# The following command assumes that the oracle login will not prompt
the
# user for any values
su - $ORA OWNER -c $ORA HOME/bin/oraadm start &
;;
'stop')
# Stop the Oracle databases:
# The following command assumes that the oracle login will not prompt
the
# user for any values
su - $ORA_OWNER - c $ORA_HOME/bin/oraadm immediate &
```

;;

esac

Step 4 Link dbora by entering:

```
# ln -s /etc/init.d/dbora /etc/rc0.d/K10dbora
# ln -s /etc/init.d/dbora /etc/rc2.d/S99dbora
```

Troubleshooting

This appendix provides information on tips, problems, and issues and, when possible, recommends solutions.

The information is organized into broad categories. However, the same issue appears in multiple locations when appropriate. You will find information grouped in the following categories:

Installation	A-2
Collection/DataStore/Aggregator/Retrievers	A-3
Reporting/Report Server/Web/QuickReport Editor	A-5
General	A-9

Troubleshooting Tips

Table A-1 lists recommendations for dealing with installation, collection, reporting, and general Service Reporting issues.

Table A-1 Service Reporting Troubleshooting (Part 1 of 9)

Tips/Problems/Issues	Recommendations
Installation	
Pre-Installation tips	PATROL and PATROL Agents must be installed before installing Service Reporting.
	The PATROL Console is installed nearby but not on the computer where the DataStore and Report Server will be installed.
	The computer where the DataStore and Report Server will be installed must be running a clean NT 4.0 Server.
	Oracle must not be currently installed on the computer where the DataStore and Reporting components will be installed.
	Use the CD to install all Service Reporting components (as opposed to remote installs) when possible.
	You must be licensed for both Lotus Domino, Oracle, and Exchange to access the Solution Reports for Lotus Domino, Oracle, and Exchange.
	Create a mirror image of your computer drives before installing Service Reporting. If you have problems, you can quickly and easily restore the original image.

Table A-1 Service Reporting Troubleshooting (Part 2 of 9)

Tips/Problems/Issues	Recommendations
Installation fails	If installation fails, check the *ISI.log, machine-namelSI.log (Windows NT) or InstallLog_machine-name-plus-PID (Unix), to locate where the failure occurred. These log files identify what components were installed and where the installation failed. Return to the installation program and attempt to re-install the components that failed. In Windows NT the *ISI.log file is located in *USERPROFILE*/Application Data/PatrolInstall. In Unix, the *.ISI log file is located in the \$PATROL_HOME\$/patrolinstall/logs directory. Use the mirror image you created before attempting to install to quickly and easily restore the original image.
Installation appears to succeed but application fails to run	Restart your system.
Report Server installs but the QuickReport Editor is not available.	If the Report Server is installed and the QuickReport Editor is unavailable, check the Web Agent for problems. Reinstall just the QuickReports. Check to see if you have upgraded Microsoft Java Virtual Machine (JVM).
Collection/DataStore/Aggregator/R	etrievers
Problems issuing common SQL queries to the DataStore	Refer to the DataStore Administrator Guide or the Oracle8i Error Messages.
DataStore Server performance problems.	Do not install both database components (DataStore Client Only and DataStore Server and DataStore Client) when you are installing on one machine only. Doing so results in problems using the DataStore Server. Select only the DataStore Server and DataStore Client option.
Aggregator and retrievers fail to start after installation	Upon installation, Auto Restart of the aggregator and retrievers is set to "Yes" and they will attempt to start. However, since there is no configuration information there, they will fail to start.
Unable to establish communication between the Report Server and the DataStore.	You must install the DataStore client on the Windows NT computer.

Table A-1 Service Reporting Troubleshooting (Part 3 of 9)

Tips/Problems/Issues	Recommendations
Unable to obtain data from a monitored computer	Make sure you can ping the aggregator and retriever machines from each other. If you cannot ping the name of your Unix box, you probably cannot obtain any data from it.
	From the aggregator computer:
	ping the retriever computer using the name that is displayed in the DataStore Console, not what you think it is.
	From the retriever computer:
	ping the aggregator computer using the name that you entered in the configuration panel, not what you think it is.
	From the server computer:
	ping the retriever computer the way it is entered in the configuration panel, not what you think it is.
To look for error messages	Using the PATROL Console, right click on SR_DATASTORE => KM COMMANDS => ADMINISTRATION => EventRET_portnumber or (HistoryRet_portnumber) => WATCH LOG.
	The default port is 3181 for PATROL 3.4 and higher.
	You may have to change the logging level to get the information you need. (See Table 6-1, "Data Collection Configuration Steps," on page 6-4.)
No data appears to be getting into Service Reporting	This problem occurs when there is no Knowledge Module loaded by an Agent and there are no consoles connected to the PATROL Agent.
	You can customize the PATROL Console so that the Knowledge Module is preloaded.
	Connect to the Agent and leave it up all day. You can check the following day to make sure data is getting to Service Reporting.

Table A-1 Service Reporting Troubleshooting (Part 4 of 9)

Tips/Problems/Issues	Recommendations
Do NOT create history filter using all wildcards (/*/*/*/*)	Only create history filters to collect data for which there are Solution Reports. Collecting all data increases the size of the database and slows collection.
	The default history filters collect all the parameters for the Solution Reports. The only reason to create additional history filters is to collect data for custom reports. If you create custom reports using the QuickReport Editor report templates, you should define history filters to capture only the data for the custom reports.
	Capturing data which is not used in any report is a waste of resources, since reports are the only way to see the data collected.
Oracle Reports missing data points. The problem can result from the agent not writing history data for those parameters to the agent history-file until much later than expected. The issue has to do with how often the agent flushes its data to the history-file.	It may be as easy as setting a pconfig variable in the agent to force more frequent history writes.
Reporting/Report Server/Web/Quic	kReport Editor
Cannot access your Web Server	Restart your Web Server. To do so, go to a MS-DOS window and at the DOS prompt, specify the following: NET STOP IISADMIN, then NET START W3SVC
Report Server installs but the QuickReport Editor is not available.	If the Report Server is installed and the QuickReport Editor is unavailable, check the Web Agent for problems. Reinstall just the QuickReports.
	Check to see if you have upgraded Microsoft Java Virtual Machine.
Cannot access the QuickReport Editor	Access to the QuickReport Editor is only allowed through the Service Reporting Web Desktop. Click the Administration tab and then the QuickReport Editor tab to access the QuickReport Editor.

Table A-1 Service Reporting Troubleshooting (Part 5 of 9)

Tips/Problems/Issues	Recommendations
Unable to open the QuickReport Editor	If you are using NTFS, you may have trouble opening the QuickReport Editor. NTFS does not automatically know the PATROL user that PATROL created. The PATROL Administrator must give the PATROL user permission to use the files.
Renaming Folders in the QuickReport Editor	When using the Browse dialog box from the QuickReport Editor in this current version, you cannot rename any folder that contains report templates. BMC Software recommends renaming the default NewFolder immediately, before storing any report templates in it. You must press Enter after renaming a folder to save the changed name.
IE doesn't download and install the Java plug-in when it encounters a converted page	Make sure the CODEBASE in the OBJECT tag has the correct URL for the Java Plug-in Software. Also, turning off execute privileges on the directory in which you put the Java Plug-in Software executable may help.
Poor performance when generating multiple reports	Refer to the Actuate document, Administering the Report Encyclopedia, for creating multiple process groups.
Unable to establish communication between the Report Server and the DataStore	You must install the DataStore client on the Windows NT computer.

Table A-1 Service Reporting Troubleshooting (Part 6 of 9)

Tips/Problems/Issues	Recommendations
Blank reports	A blank report indicates that the DataStore doesn't have any data related to this report. Relevant question to ask include:
	On the PATROL side:
	Is PATROL KM installed and running?
	Is the parameter associated with the desired report turned on in PATROL and History able?
	Is the PATROL Agent running?
	Is the History Retriever for the specified parameter turned on?
	On the DataStore side:
	Is the Retriever running and configured?
	Is there a filter set for the specified parameter?
	Is the Aggregator running and are summaries being created for the specified time span?
Labels do not appear on Trend Graphs	View graphs at 75% or higher. If you view reports at 75% or lower, labels on graph may not appear.
Restarting Actuate Services when restarting	When you restart your computer, the Actuate Services you need for Service Reporting are set to automatically restart. If you get a message saying that the services have not restarted, it's possible that Windows NT timed out <i>before</i> the services restarted, generating the message. To verify that the services are running
	Right-click the Taskbar. Choose Task Manager => Processes .
	Or
	Choose Start => Settings => Control Panel => Services.

Table A-1 Service Reporting Troubleshooting (Part 7 of 9)

Tips/Problems/Issues	Recommendations
Monitor Report Server space	You must actively monitor the available disk space on the drive partition where the Report Server is installed. If reports are being created on an ongoing basis, and old reports are never deleted, then the disk requirements for the Report Server will grow without bound. To monitor a disk partition's available space, go to Windows NT Explorer or My Computer, highlight the logical disk, then choose File => Properties .
Monitor the Report Encyclopedia	The administrator needs to clean up extraneous items in the Report Encyclopedia. Attempting to create a report instance in the Report Encyclopedia leaves an entry in the Requests\Completed folder. If the attempt was successful, then the report is stored in the directory structure visible through the Administrator's Desktop (see the Administering the Report Encyclopedia). Periodic cleanup of the entries in the Requests\Completed folder reduces disk space requirements and permits more efficient management of the Report Server.
View and manage log files	Log files are created in the path specified by the Logfile property in the configuration files (Admin Section) section. There is a Log File Cleanup Tool that deletes the log files generated by Service Reporting. The file cleanup reports (daily, weekly, monthly), scheduled on installation to run at specific intervals, are located in BMCReports/Cleanup . For more information, see "Using the Log File Cleanup Tool" on page 6-17.

Table A-1 Service Reporting Troubleshooting (Part 8 of 9)

Tips/Problems/Issues	Recommendations
Oracle reports run. Not all hourly data points are accounted for.	This might occur if the agent doesn't write history data for those parameters to the agent history file until much later than Service Reporting expects to receive and report on them. The problem appears to be a bug in versions of PATROL earlier than 3.4.11 that prevents some infrequently read parameters from being written to PATROL's history database file in a timely manner. The data does get there eventually, but too late for the summaries on the Aggregator.
	To determine if this is your problem, see if the data that is missing in the reports is missing in the DataStore by using the charts on the Data tab of the DataStore Console. If you find the corresponding parameter in the data hierarchy, right-click it and select History Chart => Hourly => Average . Make sure that the correct timespan is set for the chart in Options => Preferences . You will see a chart like the report, missing the data points.
	Then check the raw data by right-clicking the parameter again, and choosing History Chart => Raw . You will see all the data, with no gaps.
	Upgrading from PATROL 3.4.11 should eliminate the problem.
General	
PATROL restarts services that you are trying to stop.	BMC Software recommends setting Auto-Restart to Off or disabling the services (SR_DataStore) through Start => Settings => Control Panel => Services .
The Backup/Recovery utility fails	When PATROL restarts services that you are trying to stop, it might interfere with the Backup/Recovery utility.
	BMC Software recommends setting Auto-Restart to Off or disabling the services (SR_DataStore) through Start => Settings => Control Panel => Services .

Table A-1 Service Reporting Troubleshooting (Part 9 of 9)

Tips/Problems/Issues	Recommendations
To produce error files for Customer Support	 Make sure logging level is set to three for the aggregator and a history retriever. (See Table 6-1, "Data Collection Configuration Steps," on page 6-4.) Let the log run for about two minutes and shutdown the aggregator and history retriever. The log names for the aggregator and the history retriever are: the aggregator-nodename.trace for the aggregator the historyretriever-nodename-portnumber.0 and .1 files for the historyretriever. Use the most current logs located in patrol_home\log directory.
Do I need to install a PATROL Agent on the PATROL Console computer?	Only if you intend to install retrievers and/or an aggregator on your Console computer.
Receive Error Message (500) when using the product	To avoid Error 500 when using Windows NTFS security, make sure that one of the following is true: ~ Your NTFS settings are Full, All, All, All or ~ The anonymous IIS user has equivalent permissions
View and manage log files	Log files are created in the path specified by the Logfile property in the configuration files (Admin Section) section. There is a Log File Cleanup Tool that deletes the log files generated by Service Reporting. The file cleanup reports (daily, weekly, monthly), scheduled on installation to run at specific intervals, are located in BMCReports/Cleanup . For more information, see "Using the Log File Cleanup Tool" on page 6-17.
Diagnostic tests	There is a set of diagnostic tests you can run as long as you have a Web Server up and running. Please run the diagnostic tests before calling Customer Support. Go to the following URL and select the diagnostic tests you want to run. machine name/bmcscripts/installverification/installverification.html

Related Documentation

This appendix lists related Actuate and Oracle documentation that can be used in conjunction with Service Reporting. These Actuate and Oracle documents are found on the Service Reporting Documentation CD.

Service Reporting Related Documentation	B-2
Actuate Software Corporation Documentation	B-2
Oracle Corporation Documentation	B-3

Service Reporting Related Documentation

Table B-1 and Table B-2 list the documentation for the Actuate Software Corporation components and Oracle Corporation components of Service Reporting. These documents are formatted as Portable Document Format (PDF) files on the Service Reporting Documentation CD.

Actuate Software Corporation Documentation

Table B-1 Actuate Documentation

Document	Description
Administering the Report Encyclopedia	provides information about managing users, groups, roles, privileges, printers, process groups, and print requests
Using e.Reports	describes the tasks you can perform with reports that have been designed, compiled, and generated—includes using e.reports on the Web or a desktop, viewing and running a report, searching for and exporting data, printing and distributing a report
Viewing e.Reports	describes the tasks you can perform using the Actuate Viewer—includes the same topics as Using e.Reports except for running a report
LRX for Microsoft Internet Explorer	describes the tasks you can perform using Microsoft Internet Explorer in combination with the Actuate LRX
LRX for Netscape Navigator	describes the tasks you can perform using Netscape Navigator in combination with the Actuate LRX
Building an e.Reporting Web Site	provides information on accessing the Actuate Report Encyclopedia on the World Wide Web
e.Reporting Server Guide	provides information about managing the interaction between client and server to enable activities such as scheduling and running reports

Oracle Corporation Documentation

Table B-2 Oracle Documentation

Document	Description
Oracle8i Installation Release 8.1.5 for Windows NT and Windows 95/98	provides instructions for uninstalling Oracle8i for Windows NT Release 8.1.5
Oracle8i Installation Guide Release 2 (8.1.6) for Sun SPARC Solaris	provides instructions for uninstalling Oracle8i Release 2 (8.1.6) on Sun SPARC Solaris systems
Oracle8i Error Messages	describes the error messages that may appear while using Oracle products

Service Reporting Component List

This appendix lists the components of Service Reporting that you can install onto Windows NT and Windows 2000 and Unix operating systems.

Windows NT and Windows 2000 Installation Component List	C-2
Unix Installation Component List	C-4

Windows NT and Windows 2000 Installation Component List

Table C-1 lists the components of Service Reporting that you can install onto the Windows NT and Windows 2000 operating system.

Table C-1 Windows NT and Windows 2000 Installation Component List (Part 1 of 3)

Component	Description	
Install Data Collection Components		
Aggregator Console KM	Aggregator section of the DataStore KM that configures and monitors the data aggregator. The Aggregator Console KM must be installed on the Windows NT and Windows 2000 computer where the PATROL Console is running. This lets you configure aggregators on PATROL Agent computer(s).	
Retrievers Console KM	Retriever section of the DataStore KM that configures and monitors event and history retrievers. The Retrievers Console KM must be installed on the computer where the PATROL Console is running. This lets you configure retrievers on PATROL Agent computer(s).	
Aggregator	Data collection component which receives event and parameter data from retrievers to forward and summarize in the DataStore.	
Retrievers	Data collection component that retrieves parameter and event data from a PATROL Agent. Retrievers must be installed onto a PATROL Agent computer.	
DataStore Console	Interface to the DataStore used to determine what data is collected as well as monitor and maintain the data aggregators and retrievers in your environment. The DataStore Console does not need to be installed onto a PATROL Agent.	
Install Reporting Components		
Administrator Desktop for NT	Interface for managing the Report Server to schedule report generation, view reports, print reports, and set up privileges to view reports.	
QuickReport Editor	Utility that is used to create new reports based on generic report templates to meet your management reporting requirements. A series of dialogs help you define the input parameters for your report.	

Table C-1 Windows NT and Windows 2000 Installation Component List (Part 2 of 3)

Component	Description
Report Server for NT	Reporting component responsible for generating reports using data from the DataStore and communicating with clients for report viewing and printing. It also manages and controls user roles and access.
IIS Web Agent for NT	Utility that enables Microsoft IIS web server to access the Report Server from world wide web.
Service Reporting Studio	Reporting tool you can use in conjunction with the DataBase Schema to compose your own graphs of PATROL Knowledge Module data.
Netscape Web Agent for NT	Utility that enables Netscape Web Server to access the Report Server from the world wide web.
Solution Reports for Exchange and Exchange 2000	A predefined set of report templates created specifically for Microsoft Exchange and Exchange 2000. It provides information on service management, enterprise resource management, and other requirements specific to Microsoft Exchange and Exchange 2000.
Solution Reports for Lotus Domino	A predefined set of report templates created specifically for Lotus Domino. It provides information on service management, enterprise resource management, and other requirements specific to Lotus Domino.
Solution Reports for NT	A predefined set of report templates created specifically for Windows NT and Windows 2000. It provides information on service management, enterprise resource management, and other requirements specific to Windows NT and Windows 2000.
Solution Reports for Oracle	A predefined set of report templates created specifically for Oracle. It provides information on service management, enterprise resource management, and other requirements specific to Oracle.
Solution Reports for Unix	A predefined set of report templates created specifically for Unix. It provides information on service management, enterprise resource management, and other requirements specific to Unix.
Install Database Components	

Table C-1 Windows NT and Windows 2000 Installation Component List (Part 3 of 3)

Component	Description
DataStore Client Only	Utility that connects the Report Server to the DataStore when the DataStore is installed on a separate computer. The DataStore Client needs to be installed on the same computer as the Report Server for Windows NT.
DataStore Server & DataStore Client	Database used to store parameter and event data collected by data collection components, including retrievers. Use this option when the Report Server and DataStore are installed on the same Windows NT and Windows 2000 computer. The DataStore Server uses an Oracle relational database management system.

Unix Installation Component List

Table C-2 lists the components of Service Reporting that you can install on a Unix computer.

Table C-2 Unix Installation Component List

Component	Description
Install Data Collection Components	
Aggregator Console KM	Aggregator section of the DataStore KM that configures and monitors the data aggregator. The Aggregator Console KM must be installed on the Windows NT and Windows 2000 computer where the PATROL Console is running. This lets you configure aggregators on PATROL Agent computer(s).
Retrievers Console KM	Retriever section of the DataStore KM that configures and monitors event and history retrievers. The Retrievers Console KM must be installed on the computer where the PATROL Console is running. This lets you configure retrievers on PATROL Agent computer(s).
Aggregator	Data collection component which receives event and parameter data from retrievers to forward and summarize in the DataStore.
Retrievers	Data collection component that retrieves parameter and event data from a PATROL Agent. Retrievers must be installed onto a PATROL Agent computer.

Table C-2 Unix Installation Component List

Component	Description
Install Reporting Components	
QuickReport Editor	Utility that is used to create new reports based on generic report templates to meet your management reporting requirements. A series of dialogs help you define the input parameters for your report.
Report Server for Sun Solaris	Reporting component responsible for generating reports using data from the DataStore and communicating with clients for report viewing and printing. It also manages and controls user roles and access.
Netscape Web Agent for Unix	Utility that enables Netscape Web Server to access the Report Server from the world wide web.
Solution Reports for Exchange and Exchange 2000	A predefined set of report templates created specifically for Microsoft Exchange and Exchange 2000. It provides information on service management, enterprise resource management, and other requirements specific to Microsoft Exchange and Exchange 2000.
Solution Reports for Lotus Domino	A predefined set of report templates created specifically for Lotus Domino. It provides information on service management, enterprise resource management, and other requirements specific to Lotus Domino.
Solution Reports for NT	A predefined set of report templates created specifically for Windows NT. It provides information on service management, enterprise resource management, and other requirements specific to Windows NT.
Solution Reports for Oracle	A predefined set of report templates created specifically for Oracle. It provides information on service management, enterprise resource management, and other requirements specific to Oracle.
Solution Reports for Unix	A predefined set of report templates created specifically for Unix. It provides information on service management, enterprise resource management, and other requirements specific to Unix.
Install Database Components	

Table C-2 Unix Installation Component List

Component	Description
DataStore Server	Database used to store parameter and event data collected by data collection components, including retrievers. Use this option when the Report Server and DataStore are installed on the same Windows NT and Windows 2000 computer. The DataStore Server uses an Oracle relational database management system.
DataStore Instance	An occurrence of the DataStore database residing on a server.

Glossary

Actuate Live Report Extension (LRX)

A Web browser plug-in that an end user can use to find, view, and print reports accessed over the Internet. This feature cannot be used to generate reports.

Administrator Desktop

Interface for managing the Report Server. Used to schedule report generation, view reports, print reports, and set up privileges to view reports.

aggregator

A Service Reporting component that compiles the information collected from one or more retrievers and stores the data in the DataStore as raw and summarized data. *See* data aggregator.

application class

The object class to which an application instance belongs; also, its representation as a container (Unix) or folder (Windows NT) on the PATROL Console. You can use a PATROL Developer Console to add or change application classes.

application instance

A system resource discovered by PATROL. Contains the information and attributes of the application class that it belongs to. *See also* application class, and instance.

associations

A way to classify related namespace data (application classes, application instances, and parameters) used for a common purpose. Data can be associated by location, organization, and category.

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component

The subject of a measurement or event. Examples in PATROL include

- an Oracle database instance
- a host running a Windows NT server

data aggregator

A data aggregator receives event and parameter data from retrievers. It also forwards that data to the DataStore. Data aggregators control the DataStore's summarizing activities, normalize and synchronize time values between different data sources, control and monitor a retriever's status, and download configuration parameters to a retriever.

data summarization

A process that converts raw data located in the DataStore into summary data. When raw data is converted, it is organized into hourly, daily, weekly, and monthly summary time periods with summary values of maximum, average, and sum. The summarized data can be used by the QuickReport Editor and by Solution Reports.

DataStore

The DataStore is the database used by Service Reporting to store parameter and event data collected from your PATROL environment. This data is stored as raw data, measurement values, and time-summarized measurements. Time-summarized measurements are the inputs to reports.

DataStore Console

The DataStore Console is the graphical user interface (GUI) for the DataStore. With the DataStore Console, you can determine what data is collected. You can also monitor and maintain aggregators and retrievers.

DataStore KM

The knowledge module (KM) that Product Name uses to configure and monitor DataStore components, including data aggregators and retrievers. The DataStore KM lets you configure local or remote data aggregators and retrievers. You can also start, stop, and monitor the current status or performance of these components. *See* Knowledge Module (KM).

drill down

While viewing a report, the ability to view the same information in more detail as part of the same report.

dump hist utility

A command line utility that lets you save parameter history data from databases on PATROL Agents to ASCII text files.

enterprise

All the components, measurements, and events in the PATROL Datastore valid for a given time.

enterprise view

A subset of the components, measurements, and events stored in the DataStore for a given time span. For example, an enterprise view might include:

- all Windows NT nodes located in Houston and their KM parameter values for yesterday
- all Microsoft Exchange servers on nodes whose name starts "hou" and their Exchange KM parameter TotalMsgSize averaged daily for the last week

event filter

Created in the DataStore Console, an event filter controls the collection of event data. An event filter may contain type, status, and severity criteria. With an event filter, you can specify the information, state change, error, and warning events that you want to collect.

event retriever

A component that collects data when an event matches criteria specified in the event filter. Once the event occurs, the event retriever forwards the raw event data to the data aggregator.

Factory

An internal tool that generates an e.report for viewing. The Factory follows the instructions in a report executable file (.ROX) file to generate a report (.ROI).

filters

A filter is used to determine what information is collected. Product Name uses the following filters:

- history filters—used to collect parameter information
- event filters—used to collect event information

generic report

In the QuickReport Editor, a presentation (graph, table, or chart) generated by specifying parameters, selection criteria, and labels.

history filter

A history filter lets you specify what parameter data is collected from a PATROL Agent. With a history filter, you can specify a subset of the parameter data collected by the KMs installed on the agent being queried.

history retriever

A process that collects parameter information from an agent's local cache.

initialize

To provide a set of definitions and instructions as a starting point for a component or executable. These settings can normally be redefined at any point.

instance

A computer or discovered application that is running in the PATROL-managed environment. An instance has all the attributes of the class that it belongs to. A computer instance is a monitored computer that has been added to the PATROL Console. An application instance is discovered by PATROL. *See* application instance.

interval type

A specified time unit. A time unit can be an hour, a day, a week, a month, or a year.

KM

See Knowledge Module (KM).

KM list

A list of KMs to be loaded by a PATROL Agent. *See also* Knowledge Module (KM).

KM tree

A feature of PATROL for Windows NT only. One of two views of folders available in Windows NT. The KM tree displays computer classes, application classes, and their customized instances in the knowledge hierarchy. It also displays the Standard Event Catalog. The KM tree can be viewed with a PATROL Operator Console. To change KM properties and attributes, you must use the PATROL Developer Console. See also Knowledge Module (KM).

Knowledge Module (KM)

A set of files from which a PATROL Agent receives information about resources running on a monitored computer. A KM file can contain the actual instructions for monitoring objects or simply a list of KMs to load. KMs are loaded by a PATROL Agent and a PATROL Console.

KMs provide information for

- the way monitored computers are represented on the PATROL Desktop
- the discovery of application instances and the way they are represented
- parameters that are run under those applications
- the options available on object menus

A PATROL Developer Console can change KM knowledge for its current session, save knowledge for all of its future sessions, and commit KM changes to specified PATROL Agent computers. *See also* KM list, KM tree, and load KMs.

load applications

Same as load KMs; most KMs are composed of application files with a * .kml extension.

load KMs

To place KM files into memory for execution. After configuration and during startup, the PATROL Agent loads the KM files that are listed in its configuration file and that reside on the PATROL Agent machine. When a PATROL Console connects to the PATROL Agent, the KM versions that the Agent executes depend on whether the Console is an Operator Console or a Developer Console. *See also* Knowledge Module (KM).

local history

The history (stored parameter values) for an object or instance.

local history retention period

The user-defined length of time during which stored parameter values for an object or instance are retained.

manual collection

Lets you start or stop collection of parameter data regardless of the settings in a history filter. Manual collection lets you be very specific about the data being collected. Once you use manual collection, those settings remain in effect until you clear them.

open data retriever

Process that reads a comma separated value file and lets you load dump_hist data into the DataStore. *See* retrievers.

QuickReport Editor

A graphical user interface that uses generic report templates to create new reports. A series of dialogs help you define the input parameters for your report.

QuickReport Template

One of several report definitions or templates that a user can select to generate a specific report. The definition includes

- a visual presentation and a list of namespaces that control the presentation
- a family of content and a list of required namepaces to specify the content

For example, the top/bottom N summary graph defines the visual presentation as a bar graph and defines the input as at the most N rows of data, sorted in ascending or descending order.

report

Generated presentations (graphs, tables, or charts) based on stored PATROL event and parameter data that you can view remotely using a Web browser on supported platforms.

report consumer

Person who locates, runs, schedules, and views report documents. Typically, this person is a manager or senior IT professional in charge of managing a portion of the enterprise infrastructure.

report composer

A person who creates schedules and runs report templates, creates new report templates, and ensures that the necessary data is being collected. Typically, this person is a technical IT professional who needs certain kinds of PATROL information to appear in reports.

Report Server

Reporting component responsible for generating reports using data from the DataStore and communicating with clients for report viewing and printing. It also manages and controls user roles and access. With the report server, you can:

- manage users request (on-demand reports with run-time parameters)
- control the report encyclopedia and validate users and requests
- generate report instances
- print reports
- manage persistent objects, such as report instances, folders, users, and roles

report store administrator

A person who installs components, configures components, and periodically cleans up the report store/encyclopedia (for example, archiving old reports, removing old reports, or removing unused report templates).

report template

Report templates (RTs) are definitions that direct Service Reporting to extract data from the DataStore for a given time span and generate a presentation in the form of a graph, table, or chart.

retrievers

Components that compile, filter, and forward agent data to an aggregator. Aggregators send filter settings to the retrievers that specify which parameter data and event data to collect. Product Name includes the following types of retrievers:

- History Retriever—collects parameter data from an agent's local cache
- Event Retriever—collects event data
- Open Data Retriever—reads a comma separated value file and lets you load dump_hist data into the DataStore

.ROI files

A file that contains a viewable and printable report. ROI is an acronym for the Actuate term **report object instance**. ROI files are stored in the Report Encyclopedia. You can use the End User Desktop or the Administrator Desktop to create report document files.

.ROV files

A file that contains parameter values used by the Factory to generate the e.report. ROV is an acronym for the Actuate term **report object value**. These files store parameter values specified for a specific report executable. The values in the file filter the data for a report document. A parameter values file is automatically created when users run the report.

.ROX files

A file that contains the instructions for generating and viewing a report object. ROX is an acronym for the Actuate term **report object executable**. When executed, these files generate report documents with current data.

Solution Reports

A package of report templates created for the management of a particular technology or application. Solution Reports require little or no user setup.

threshold

A point or points that define a range of values, outside of which a parameter is considered to be in a warning or alarm range.

time span

A particular interval defined by its interval type and start time, for example, week of January 10, 2001.

time span type

For simple time spans, the interval type. For nested time spans, the interval type and number of sub-intervals, for example, weekly span shown as 168 hours.

Web Desktop

The component of Product Name that provides access to reporting. Using the Web Desktop, you can view contents of the Report Encyclopedia and create your own reports with the QuickReport Editor. In general, the Web Desktop allows you to generate, schedule, locate, view, print, and distribute reports.

Windows NT Viewer

On Windows NT platforms, an application that an end user can use to print and view reports.

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